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## ABSTRACT

A seminar was held in Dakar (Senegal) to bring together African university presidents, vice-chancellors, rectors, and top-level administrators to discuss the following themes: policies and modalities of admissions, planning and allocation of resources, structures of postsecondary education, and new technologies and interuniversity cooperation. This proceedings document summarizes the presentations made and the discussion that took place in these theme areas. Appendixes provide the Dakar statement on the restructuring of the African universities, which is a summary of the seminar's views and discussions; the texts of five seminar presentations; a report on several workshops; a list of reference documents; and a list of participants. (JDD)

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ED 405 749



# Priority: Africa

Report of the Ad Hoc Group of Experts on the Development of Higher Education in Africa

## Development of higher education in Africa

1981

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AE 027 183

# **PRIORITY AFRICA PROGRAMME**

## **REPORT**

**Development of Higher Education in Africa**

**The DAKAR Seminar  
on the  
Restructuration of the African Universities  
19 - 24 November 1992**

**In co-operation with  
the Association of African Universities (AAU)**

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## HISTORICAL BACKGROUND

Over the past ten years, a deeper insight has been sought into the situation of higher education in Africa. The subject has been on the agenda of a number of high-level meetings involving all African Member States. These meetings have examined trends and issues and made recommendations for a special programme of action as indicated below.

Organized by UNESCO with the co-operation of the Organization of African Unity and the Economic Commission for Africa, the fifth Conference of African Ministers of Education and those responsible for Economic Planning was held in Harare in July 1982. It had on its agenda an item devoted to consideration of the role of higher education in national development. Particularly, attention was focused on the part which African Higher Education should play in training indigenous skilled personnel in the development-oriented scientific and technical research in preserving cultural identity, and promoting the cultures of African peoples and in modernizing educational systems.

In the Declaration adopted at the close of the Conference, African Member States resolved to strengthen their co-operation in the sphere of higher education. Specific recommendations were made regarding the development and modernization of higher education. In particular, the Conference recommended that UNESCO should "carry out a Special Programme on the future of higher education in Africa with a view to raising the standards of instruction, promoting the collective use of trained personnel and potential, and coordinating the higher education policies of African Member States" (Recommendation no. 8).

Since the adoption of this declaration, many activities have been undertaken by such organizations as the Association of African Universities (AAU), the United Nations Economic Commission for Africa (ECA), the World Bank, the Commonwealth of Learning, the Association of Commonwealth Universities, the Agency for Cultural and Technical Co-operation (ACCT), the Association des Universités partiellement ou entièrement de langue française (AUPELF), the Conseil africain et malgache pour l'enseignement supérieur (CAMES) and other NGOs interested in the development of higher education in Africa. Various aid agencies, foundations and institutions have also been active in extending support to the development of national systems and to individual institutions of higher education in Africa.

As far as UNESCO is concerned, between 1983 and 1987, a series of activities were carried out, in co-operation with the UNESCO Regional Bureau for Education in Africa (BRED) to define the general thrust of the proposed special programme, identify its main features, and select the methods of action to be used. In October 1984, a regional Advisory Committee for Higher Education in Africa was created, with responsibility for advising on the strategy to be adopted to carry out the programme.

This Committee identified two main priority lines of emphasis, namely,

- i) the pedagogical and scientific training of higher educational personnel, and
- ii) the production of documents and text-books for higher education.

Practical suggestions encompassing other fields of interest for higher education in Africa, were made by a regional symposium on higher education held in BREDA, Dakar, in May 1987.

### Critical assessment of the situation

Specific studies and field activities conducted since 1983 have shown that the unsatisfactory situation of higher education in Africa, was the result of the combined effects of a range of factors such as those described below.

Economic difficulties at the national level have led frequently to drastic financial constraints limiting seriously the resources allocated to higher education generally and to universities in particular at a time when the demand for higher education has been at a high level.

The lack of professional training. There is often a dearth of qualified experienced teachers.

Absence of a clear-cut higher education policy and of a clear definition of the tasks which higher education should undertake to contribute to the search for solutions of development problems. As a consequence, study and research programmes are not always relevant to the socio-cultural situation in the country nor do they always match the economic development efforts being exerted.

There is a lack of motivation among teaching staff whose status and remuneration are felt to offer little incentive. The lack of motivation is also present among students whose general behaviour reflects the uncertainties and apprehension aroused by the dismal employment prospects facing them.

Efforts of harmonization, coordination and collaboration in framing higher education policies for the different African States are lacking.

GENERAL STRATEGIES  
FOR THE IMPROVEMENT OF HIGHER EDUCATION IN AFRICA

**I. STRUCTURE FOR THE SPECIAL PROGRAMME**

The Special Programme for the improvement of higher education in Africa consists of activities organized either in the form of projects or sequential series implemented under a regional co-operation mechanism. It gives support to action at the national, sub-regional and regional levels.

At the sub-regional level plans have been made to set up 5 programme-based networks : two in West Africa, one in Central Africa, one in East Africa and one in Southern Africa. Each programme network will be supported by a centre of excellence at a university where resources needed for the programme will be assembled. Three priority strategic areas have been identified namely : training, scientific and educational documentation and joint utilization of resources. In each of these areas, the special programme will pursue specific objectives and make use of appropriate modalities of action.

**II. ACTION UNDER THE PRIORITY AFRICA PROGRAMME**

The programme Priority Africa was established by the Director-General and approved by the General Conference of UNESCO (25C/Resolution 27) as a contribution to the implementation of the United Nations Programme of Action for African Economic Recovery and Development. Concerning higher education, the Director-General stated in the Priority Africa programme :

"I have reached the conclusion that the main lines of the priority assistance that UNESCO could be asked to provide in the area of higher education are the following:

(a) action - at the initial training stage and through in-service training - to raise the level of teaching personnel;

(b) improvement of the quality of research conditions and facilities (computer equipment, subscriptions to scientific and technical journals and to data banks);

(c) modernization of the storage, monitoring, management and exploitation of scientific and technical information, through appropriate equipment and high-quality staff;

(d) improvements in both the quality and professional efficiency of university management and administrative personnel;

(e) revision of the content of curricula and teaching equipment with the aim of making them more relevant to the problems of economic and social development - to be undertaken in all subjects, with particular emphasis on scientific and technological subjects and on the development of the social sciences;

(f) help to governments for the improved planning of the scholarships they award, with particular reference to ensuring that the courses of study followed by African students abroad are relevant to the needs and problems of their own countries and qualify them for employment on their return to Africa;

(g) strengthening the capacity of universities to communicate among themselves, whether through the promotion of joint activities, through exchanges of teaching staff or students, through participation in joint research projects, through the free and rapid circulation among them of the teaching tools and data they possess, or through co-ordination to avoid duplication involving a negotiated regional division of specializations, whereby - as a result of a clear definition of priorities - increased resources could be made available so as to achieve international standards of excellence;

(h) efforts to help African universities break out of their too frequent isolation by bringing them into contact with the cultural, scientific, technological, economic and industrial communities of other regions.

This array of measures, all of which are aimed at an optimal use of university resources and potential, could be carried out under two existing institutional mechanisms. These are the committee set up in 1987 to advise me on strategies for improving the quality and relevance of higher education in Africa and the special programme for the improvement of higher education in Africa, currently under consideration by UNDP, which provides for a regional mechanism for implementing projects aimed at strengthening the scientific and technological potential of higher education institutions."

For the planning of this programme, AAU convened in Accra, from 1 to 2 November 1990, at the request of UNESCO, a preparatory meeting of experts from universities and donor agencies. As a result of their deliberations, a programme outline was drawn up focusing on three major themes :

#### 1) Mission

Higher Education Institutions: nature and functions

- Higher Education: past, present and major trends

- The African Higher Education Institution: history, philosophy, issues and environment
- Possible Agenda for Higher Education Institutional Development in Africa.

## 2) Function

Leadership and Organization of the Higher Education Institution:

- Charters and Structures
- Decision making and policy formation
- Communication and Interaction within the institution
- Research.

## 3) Efficiency

Resource Planning/Allocation and Cost Effectiveness:

- Higher Education Financing : trends
- Institutional quality, relevance and effectiveness
- Use of impact of new information and communication technologies
- Networking for efficiency
- Evaluation strategies.

It was envisaged to organize a modular series of reflection and training workshops of 5 days duration each for some 40 university rectors, vice-chancellors and presidents of African universities (one university per Member State of the African region). The first workshop was held in Accra (Ghana) from 25 to 29 November 1991. The second workshop took place in Dakar (Senegal) from 19 to 24 November 1992 and the third workshop will take place in Alexandria (Egypt) from 26 to 30 April 1993. Logistic support for the organization will be assured on a contract basis with the UNESCO national commissions and the host universities in the respective countries. The AAU, as well as intergovernmental and non-governmental organizations which are active in supporting Africa Higher Education will be involved in this undertaking.

By bringing together a specific target audience of African university presidents, vice-chancellors, rectors and top-level administrators, the seminars aim at forging a consensus of views and concerted plans for action in these areas.

The conclusions and recommendations of each seminar will be incorporated in a plan of action which will complement existing initiatives in the field of development of African higher education.

### III. THE DAKAR SEMINAR ON THE RESTRUCTURING OF THE AFRICAN UNIVERSITIES (19 - 24 November 1992)

#### OPENING SESSION

The opening session was held in the Great Auditorium of Cheikh Anta Diop University, Dakar, in the presence of representatives of the Diplomatic corps and many personalities of the political, cultural, university, research and scientific world. The session was chaired by Mr André SONKO, Minister of Education of Senegal. It was addressed by Professor Souleymane NIANG, Rector of the host university, Mr Eric ARMERDING, Director, Co-operation with African States of UNESCO, representing the Director-General of UNESCO, and the Chairman. Their statements are attached as Annexes I, II and III.

In his introductory speech, Professor Souleymane NIANG welcomed the participants recapitulating briefly the objectives and the university dimension of UNESCO's programme "Priority Africa". He then expressed the wish to see our universities change into true development universities where institutions with the requisite competence provide the necessary refined training for leadership.

Mr Eric ARMERDING conveyed the regrets of Mr Federico Mayor, the Director-General of UNESCO, for being unable to participate in the second seminar. Mr ARMERDING recalled UNESCO's interest in higher education in Africa. "The Director-General nourishes the hope" he said, "of seeing Heads of African Universities play an important role in the action in progress for bringing about radical changes in the management of institutions of higher education".

As recommended by the Sixth Conference of Ministers of Education and Those Responsible for Economic Planning in African Member States, which was held in Dakar from 8 to 11 July 1991, the strengthening of higher education should help build up a bank of ideas and knowledge to assist in the development of education and of society itself. For this, among other reasons, UNESCO, thanks to its programme "Priority Africa", offers to the principal actors in the field of higher education a forum for reflection and discussion where trends can be analyzed and orientations and strategies necessary to operate changes can be defined with a view to bringing about necessary changes and to promoting good quality higher education. The Dakar seminar would bring its contribution to this process. It would be analyzing the following three principal themes :

- Policies and modalities of admissions

- Planning and allocation of resources
- Structures of post-secondary education.

UNESCO, added Mr ARMERDING, continues to listen to the needs of Africa and would put at the disposal of African Universities its programme UNITWIN and its key component, UNESCO chairs. He thanked the Senegalese Government and the Cheikh Anta Diop University for their hospitality. He also thanked all the institutions which could be contributing to the success of the seminar on higher education, among them UNDP, ACCT, AAU, IAU, CAMES, AUPELF and UREF.

In his address opening the seminar, Mr André SONKO, Minister of Education of Senegal, welcomed the Heads of African Universities and international bodies associated with the organization of the second seminar of Vice-Chancellors. Recalling the causes of the worsening of working conditions of students and university teachers, he emphasized the need for a better control of university admissions to ensure that measures taken do not produce long term adverse effects. Students must especially be placed in a favourable academic environment and offered sufficiently varied courses to enable each one of them to develop his potentialities. Mr SONKO recalled the financial difficulties due to the present hard economic situation. He stated that a better allocation of available resources will increase the internal productivity of our universities and institutes of higher education. It is also important that universities improve their external effectiveness by including in their central preoccupations a professional training that will guarantee to degree holders the ability to adapt themselves to new working conditions and to new knowledge and know-how. Hence the need to increase relations between universities and the economic world.

Mr SONKO ended his address by thanking all the organizations and associations which were working for the success of the second seminar, especially UNESCO and the Association of African Universities. Senegal based much hope, he added on UNESCO's programme "Priority Africa", and would draw inspiration from reflexions contained in the programme to nourish a national concerted effort for the development of higher education.

#### PROCEEDINGS

After a brief pause, delegates proceeded to the election of the bureau of the seminar, as follows :

|                    |                                                                              |
|--------------------|------------------------------------------------------------------------------|
| President          | Professor S. NIANG, Rector of Cheikh Anta Diop University of Dakar, Senegal, |
| 1st Vice-President | Dr L. T. JONATHAN, Pro-Vice Chancellor of the University of Lesotho,         |
| 2nd Vice-President | Professor A. HENDAOU, President of the University of Tunis III, Tunisia,     |

- 1st Rapporteur                      Professor Komlavi F. SEDDOH, Rector of  
Université du Bénin, Lomé-Togo, and
- 2nd Rapporteur :                    Mr R. JACOB, representing the Vice-  
Chancellor of the University of  
Namibia.

#### A - FIRST PLENARY SESSION

The first plenary session was chaired by Professor S. NIANG. In introduction, Mr ARMERDING, Director, Co-operation with African States of UNESCO, presented the objectives and the programme of the seminar, the main theme of which bears on "Restructuring of African Universities" including sub-themes. This presentation was followed by short communications presented by the Universities of Namibia, St-Louis in Senegal and Algiers on the impact of the first seminar in Accra on their respective institutions.

##### 1. Introduction of the objectives and programme of the seminar

After recalling the methodology that could direct the reflexion, namely the taking into account of the long term and the analysis of the great orientations of development and economic management, Mr ARMERDING introduced the sub-themes of the seminar, as summarized below. The full text is in Annex IV.

##### Sub-Theme 1 : Policies and Modalities of Admission

Two preoccupations to be considered were:

- a) The unjustifiable partitioning of courses, which sets "traditional" universities in opposition to responding realistically to the challenging call for structural change arising from the rapid increase of knowledge that necessitates interdisciplinary approach, and
- b) The rapid growth of students numbers. (Current estimates are 2.900.000 students for the whole of the African continent, of whom 30 % are females).

The problem of numbers was linked with that of generally high rates of failures in African universities, which constituted a source of worry for teachers and political authorities. The changes in academic practices which could be introduced should take the causes of the failures into account if suitable solutions were to be found for resolving university problems of structures and human resources development.

Another cause for worry was the high rate of unemployed graduates. This posed the problem of the inadequacy of profiles

on the labour market due to a poor knowledge of what public and private enterprises required by way of qualified personnel.

There was the need for a better control by universities of the distortions between student numbers in the various specialities and the needs of the labour market. It was hoped that discussions on the themes of policies and modalities of admissions would lead to new ways of tackling the problem of mismatch between students preparation and the world of work.

#### Sub-Theme 2 : Planning and Allocation of Resources

The financing of higher education was entirely being borne by Government. Consequently, as economic output declined, in almost all the African countries, national capacities to finance university education dropped, and universities had been progressively forced to accept sizeable cuts in government financial provision. University budgets become insufficient in relation to needs. Universities must, therefore, make an effort with judicious management of available resources, to be cost-effective.

#### Sub-Theme 3 : Structures of Post-Secondary Education

Structures of the entire system of post-secondary education require being diversified in order to meet the needs of development. The organization of the university in mono-disciplinary modules imposed an artificial partitioning. Among the consequences were cases of ill-adapted syllabuses, imbalance in orientation of students and of research programmes of inadequate relevance. Greater emphasis on interdisciplinary organization of post-secondary structures might help solve the problems of development currently facing the African continent.

#### Sub-Theme 4 : New Technologies and Interuniversity Co-operation

a) Efforts should be made towards the utilization of new information and communication technologies by post-secondary institutions in Africa. This would provide a useful tool for the examination and resolution of pluridisciplinary problems such as AIDS. The UNESCO/WHO programme of Co-operation for the Prevention of AIDS had its roots in the emphasis that needed to be placed on interdisciplinary teaching, learning and research and the formation of networks of training and research institutions. Here the latter would facilitate the utilization of new technologies for distance education as well and help to promote the requisite mastery of its technical, administrative and academic aspects.

It is in this perspective that are situated the action plans envisaged on distance education in ARUSHA as well as in LOME for

computer science. And so will be formed the wide scientific exchange spaces stretching beyond the linguistic divisions of the African continent.

#### b) Round Tables on Co-operation

These Round Tables will be an opportunity to reflect on the possibilities of exchanges between African universities by organizing a true interactivity in the use of new communication technologies.

#### Conclusion

The proposals above were in time with the wish expressed by the OAU Heads of State and Government at their Summit meeting in Dakar in June 1992, in a resolution adopted on higher education institutions in Africa "calling on Member States and UNESCO to assist African Institutions of higher education and Universities in fully accomplishing their mission and carrying out their functions with better adapted structures and the utilization of methods of management enabling the use of efficient innovations".

#### 2. Brief communications

Participants followed with accounts of the impact which the Accra seminar had made on the functioning of the institutions they represented :

##### a) University of Namibia

At the time the first seminar on higher education took place at Legon, Accra, the University of Namibia was still in its preparatory phase. It could, therefore, implement some of the recommendations with the result that :

- i) a MISSION Statement for the University of Namibia had been worked on.
- ii) an agreement had been signed in conformity with the UNITWIN Project organizing a South-South and North-South co-operation.
- iii) the Vice-Chancellor had set up a strategic planning and development unit and appointed an administrative assistant, and,
- iv) a University foundation had been created to explore financing possibilities.

##### b) University of St-Louis (Senegal)

This institution, which had also been recently created, benefitted from the Accra seminar. Besides, the Rector informed participants about an emerging national concerted

effort in respect of higher education in his country. This endeavour aimed at bringing together all the people interested in the mission of the University, would use the results of the reflection at the Accra meeting.

c) Algeria

The representative of Algeria informed the seminar of his country's experience of the "open university". The institution was charged with continuous training and was contributing to the solution of the problems of higher education in Algeria. It operated on a small budget. It employed part-time teachers and functioned in partnership with large-scale enterprises. This university of the second chance for Algeria used distance teaching technology.

d) Morocco

Professor NIANG, Rector of Dakar University spoke about the creation in Fez, Morocco, of a private scientific university which would be charged with high level training. It would welcome teachers and students from all walks of life. The construction of this university would be completed in July 1993.

The seminar then turned to the following four sub-themes, which were introduced by four experts:

Sub-theme 1 - Policies and Modalities of Admission

Principal speaker - Professor J.F. ADE AJAYI (Nigeria)

Sub-theme 2 - Planning and allocation of resources :  
Optimal utilization of government grants

Principal speaker - Professor K.W. GOMA (Zambia)

Sub-theme 3 - Structures of Post-Secondary Education in Africa.  
Innovations and reforms

Principal speaker - Professor Souleymane NIANG (Senegal).

Sub-theme 4 - Restructuring interdisciplinary courses,  
new communication technologies and inter-  
university co-operation

(Document prepared by a group of specialists).

B. SECOND PLENARY SESSION

Chairpersons : Rector NIANG and Vice-Chancellor JONATHAN

1. SUB-THEME 1 - POLICIES AND MODALITIES OF ADMISSION

In his introduction, Professor AJAYI stressed the following main points :

- a) In the face of a growing demand from school-leavers from a very democratized secondary education and of limited financial means at the disposal of higher education, admission policies and practices require being rationalized, account being taken of the need for balance between student numbers, available resources and manpower requirements.
- b) It is important to define precisely the role of universities by insisting on research, creativity and the capacity to generate new knowledge. Efficiency must not be measured by the number of graduates produced, but rather by their ability to produce the knowledge that will help to reduce the dependence and the marginalisation of African peoples. Universities seen in this way are essential development factors.
- c) If, for the individual, the primary or first level of education constitutes the foundations of education, at the national level only a good higher education crowning the whole educational system can guarantee the requisite strengths of structure to the entire edifice.
- d) Like universities, other forms of higher education structures deserve the greatest attention.
- e) Admission policies should be part of the national planning of the economy and manpower needs. Universities must be involved in their conception and be able to maintain their autonomy in implementing them - particularly in reaching a consensus on training units, optimal size of institutions, teacher student ratio and the cost of training.
- f) Admissions must essentially be based on merit. This does not mean that measures should not be taken to encourage the admission of women and candidates from less wealthy groups. In the latter case also merit criteria should be taken into account.
- g) Other methods and techniques of higher education, like distance education and open universities, can help to solve the problem of student numbers in relation with available means.

The theme of admission policies was the subject of a very lively discussion whose main points were the following :

- a) In many countries, higher education is directed by Ministers of education rather than Vice-Chancellors or Rectors. The involvement of university heads in national planning and elaboration of admission policies needs to be encouraged.
- b) The policy of higher education must remain flexible in order to facilitate its adaptation to our constantly changing world.
- c) Faced with the decline of the economic situation and the growing number of unemployed graduates, the Universities must develop links with the business and industrial world particularly through the creation of professional courses.
- d) Institutions of interuniversity cooperation like the AAU and AUPELF can contribute to the elaboration of plans for higher education for the African continent. This will help to define a policy for the creation of regional courses and centres of excellence. They are in a position to bring together the necessary material and human resources for the purpose.
- e) The development of research will facilitate the organization of services in African universities to meet the needs of national development. Students must be closely associated with such services.
- f) Selection and training policies must take into account the realities of the labour market while aiming at capacity to meet such criteria as student and professional mobility. Training for self-employment must also be encouraged.
- g) Admission policies must go hand in hand with a rational orientation of students, based on diversified courses and structures.
- h) By valorizing careers in higher education it will be possible to have a sufficient number of competent staff to implement policies of orientation which is one of the "pillars of citizens right" to higher education.

### C. THIRD PLENARY SESSION

Chairmen : Rector NIANG and Professor HENDAOU

#### SUB-THEME 2 - PLANNING AND ALLOCATION OF RESOURCES

Professor L. K. H. GOMA of the University of Zambia spoke to his paper on the sub-theme and underlined the following points:

- a) At first, African states were able to finance sufficiently their universities. But the worsening economic conditions have prevented them from meeting adequately the demand of these universities as they grow and their needs increase. This situation compels institutions to seek other sources of finance. However, it is important to ensure that income generating activities do not divert the university from its principal mission.
- b) Very often, state grants cannot be used at the discretion of universities. This makes difficult the realization of financial autonomy so much desired by universities.
- c) Faced with the growing insufficiency of state grants, Universities must explore other sources of funding. Among these are the pulling of resources together for the creation of regional structures and courses, and the possibility of providing saleable services. Unfortunately, the latter can also be hampered by the financial difficulties facing African countries.
- d) Moreover, higher education must not continue to be considered a state monopoly. It is possible to envisage the creation of high-quality private institutions, due care being taken, however, not to generate a feeling among students of being discriminated against through money and the drain of the best teachers towards such independent establishments.
- e) Confronted by the difficult economic situation of their countries, African universities must strengthen management of the resources made available to them.
- f) The cost of social services constitutes one of the greatest difficulties facing universities. In view of the need for the universities to contribute to the rapid transformation of the continent, state financial grants must be supplemented by that of the private sector and students' own contribution. One might envisage the cost of municipal services being borne by local authorities, and that of the well-being of students by the students themselves.
- g) Planning is a difficult task when everything constitutes a priority. But it is urgent that universities have strategic plans in order to give an orientation and set a goal to their effort. The recognition of the importance of good public relations adding value to the potentialities of universities is also necessary.
- h) Certain norms were suggested to guide internal sharing of university funds by allocating lump sums to sectors which have for long been insufficiently provided for, like documentation, research, training of trainers and maintenance of infrastructure and equipment. Student teacher ratios were also suggested as a basis for the allocation of government resources.

A very rich and lively discussion followed the presentation of the theme by Professor GOMA in the course of which participants stressed the following main ideas :

- a) African universities must elaborate strategies that would enable them to put on a clear basis rules capable of guiding their relations with states. These strategies must take into account their long-term needs and should not be short-term survival strategies.
- b) The creation and development of a sound public relations system within the universities to increase contacts with financing sources.
- c) Management autonomy seems to be the best means of enabling the university to manage its resources efficiently. It is, however, essential that such resources should be put at the disposal of the university in good time.
- d) Sectors which were for a long time not given sufficient attention, like documentation, research, maintenance of equipment and training of trainers, must be given particular attention. Opinions differed, however, as to the proportion of available funds to be allocated to such sectors.
- e) Faced with limited state subsidies, universities must make the effort to diversify their sources of financing by using their expertise in the fields of training, research and services. Funds for higher education development should be created for the setting up of centres of excellence.
- f) Universities must bear in mind the cost of training and pool together, anytime it is possible, their material and human resources to develop regional courses and structures. Their management must be transparent, particularly in the preparation, presentation and implementation of their budgets. Such transparency will reinforce the state's and donors' confidence in them.
- g) Finally the state should no longer be considered to have the monopoly of higher education. It was suggested that the creation of private good quality higher education institutions should be encouraged to lighten the load on governments.

#### D. FOURTH PLENARY SESSION

Chairpersons : Dr L.T. JONATHAN and Professor HENDAOU

#### SUB-THEME 3 - POST-SECONDARY EDUCATIONAL STRUCTURES

Professor NIANG, Rector of Cheikh Anta Diop University of Dakar, developed ideas under the following headings :

a) Crisis of Post-secondary education

Post-secondary educational structures in Africa are going through a serious crisis whose causes are many ; among which are:

- i) economic difficulties of African countries that have affected universities and led to their dysfunctioning.
- ii) the large numbers of students entering or leaving the universities and those in transit, leading to overpopulation in the first cycle;
- iii) lack of global scientific and educational policies;
- iv) dearth of motivation for teachers who are not involved in the solution of the crisis or in the planning of academic strategies, and
- v) tendency to lose sight of the ethics and the rules of moral conduct.

b) Present Post-Secondary Structures

Structures have been inherited from metropolitan traditions of the colonial era.

- i) The inherited structures are of four types : universities, professional higher schools, research institutes and a combination of universities, higher schools and institutes.
- ii) As structures, these on the whole do not achieve the objectives of educational systems to meet the needs of national development. Their restructuring is, therefore, a necessity.

c) The objective of restructuring

The objective aimed at, must be the training of national development personnel through teaching and research so as to put an end to material and moral poverty on the African continent; it being understood that :

- i) material poverty prevents African countries from owning the scientific tools necessary to exploit the continent's wealth. We must lessen this poverty by restructuring the training system so as to avail ourselves not only of knowledge but also the know-how and how to be.
- ii) moral poverty results from leaving aside African basic values and making dependence a way of life.

d) The basis of restructuring :

Restructuring must be based on the training of :

- i) development personnel and an elite who will enable Africa to possess its own development actors, and
- ii) men and women with humanistic knowledge who will take moral responsibility for development.

e) Requisite conditions for restructuring

To restructure to effect, higher education institutions would need to have a large amount of :

- i) academic autonomy, especially in relation to decision-making regarding numbers or enrolments, and
- ii) administrative and management autonomy as regards resources for self-development like services.

All of this must be over-arched by a mechanism which guarantees authority in both the administrative and academic fields.

f) The kinds of restructuring to be promoted

The restructuring aimed at fall into three principal categories :

i) Category 1 : New training strategies for development based on :

- the creation of professional training courses leading to work;
- the renovation of pedagogic strategies to achieve better training;
- the redefinition of research structures leading to the creation of development structures that integrate all the dimensions of research, in particular through the creation of post university training and centres of excellence (development research structures may be organized in networks), and
- the redefinition of control structures for a more efficient evaluation.

ii) Category 2 : Structures of concertation for development which are capable of generating an environment of peace in order to create the stability necessary for lasting and good quality training and research and therefore create networks of :

- local or internal mechanisms for relating positively to social partners;
- external relations charged with external co-operation for the search of resources and the development of scientific links with other universities. These networks will be responsible for the external preparation of teachers.
- systems for the transmission and circulation of information, and
- arrangements for the control of equivalence of degrees in order to facilitate the mobility of teachers and students.

iii) Category 3 : Cultural activities on University Campus which will help improve the living and working conditions of the whole university community by restoring to the university campus its role as a place for cultural activities.

The presentation by Professor NIANG was followed by a very lively discussion. Participants in general agreed with his points of view and the proposals he made. They stressed, in particular, the need for :

- a) a large amount of autonomy in :
  - i) the management in the academic and administrative fields and in the diversification of sources of financing,
  - ii) the creation within the institutions of structures that would generate and manage the peace necessary for university training and research.
- b) establishing a moral code capable of controlling people's behaviour on the university campus.
- c) not losing sight of the indispensable articulation that must exist between higher education and the other degrees of the educational system, and
- d) the planning of courses and syllabuses on a multidisciplinary base that will allow universities to improve their contribution to a lasting development of the African continent by facilitating a global approach to the problems facing it.

# E. FIFTH PLENARY SESSION AND WORKSHOP

## SUB-THEME 4 : NEW TECHNOLOGIES AND INTERUNIVERSITY CO-OPERATION

Chairman: Professor S. NIANG

Discussion of this topic was centred mainly on:

- the intensification of existing awareness of the subject, and the transmission of information additional to that communicated at the Accra Seminar.
- triggering thought and discussion with a view to highlighting the real possibilities of, constraints on, and practical conditions and ways and means of introducing, new technologies (NT) in African universities so as to improve their quantitative and qualitative efficiency.
- examining the objectives of inter-university co-operation, and ways and means of strengthening it, particularly in the framework of existing mechanisms.

## THE INTRODUCTION OF NEW TECHNOLOGIES IN AFRICAN UNIVERSITIES

### (a) General introduction

To establish the conceptual framework of this thought and discussion in pragmatic and concrete terms, an overall picture of NT and their utilization in higher education and research was presented at the outset by:

- Régine Thomas and Philippe Perrey, French experts engaged in a European-scale university distance education operation (the OLYMPUS Programme). They screened representative videos of the programmes already undertaken in this context, and outlined projects in preparation which could be of interest to African universities.

- Didier Oillo and René Bourrel, experts working with AUPELF/UREF, one of whose major concerns is the improvement of scientific and technical information and its dissemination in French-speaking university circles by facilitating access to knowledge, improving communication, and favouring the development of co-operation among all French-speaking universities (UNISAT Programme and SYFED centres).

- Ray Patten, an Irish expert, who illustrated his address with practical examples of the use of new technologies in Ireland and in Anglo-Saxon education systems, and referred also to the possibilities offered to higher educational institutions in Africa, citing in particular the case of Namibia.

(b) Workshops

Several practical workshops were held in parallel\* and provided an opportunity for each participant to try out multimedia sets of material, including one set on the fight against AIDS (written material, CD-ROM, interactive videodisk, video cassettes, on-line interrogation of specialized data-banks), thereby enabling them to acquire a practical grasp of the various possibilities of optimum utilization of these facilities in the context of initial and on-going training, for the further training of existing instructors and practitioners, and very broadly speaking for the information of research workers and all those involved in the education system.

(c) Discussions

The demonstrations and the discussions which followed them highlighted the advantages and benefits which African universities could derive from the use of NT and distance education methods which could undoubtedly constitute positive factors of response in cases where traditional systems are nowadays of no avail (too many students, shortages of highly skilled personnel to teach certain specialized or new subjects, lack of reference material, inadequate back-up and updating of knowledge, etc.). But the use of NT also raises problems, and is subject to constraints; these too were examined.

First and foremost, administrative, technical and organizational preliminaries were noted and analysed in detail in the light of the physical nature of the material and the possible ways in which it can be used, either for scientific and technical information or for teaching purposes (face-to-face or distance teaching, self-instruction or learning in the presence of a teacher, individual or collective learning). This aspect raises problems relating to:

- The reception, recording, reproduction, archiving and storage of material.
- Conditions of circulation and use.
- Forms of training and how they are used.

Furthermore, the sociological consequences of the introduction of NT in higher education were identified. Several participants emphasized the risk of subordinating the role of the teacher to the use of these facilities, and the consequent need to place due value on the innovative activities of the "pioneer" teachers who embark upon their use. In any case, the Rectors and Vice-Chancellors present recommended that a number of important parameters be taken into account, notably with regard to:

\* cf. the detailed report of the workshops in Annex VI

- Institutional criteria: having regard to the official acceptance in academic circles of the use of NT, the latter should be given due recognition in the scientific career record of the teacher concerned.

- Administrative management criteria: steps to be taken by the authorities for the incorporation of these new factors in the universities.

- Pedagogic criteria: a study of the adaptability of teaching methods, curricula, examination systems, etc.

- Economic criteria: the need to give precedence to sub-categories of functional utilization in order to make capital outlay on premises, equipment, etc. economically profitable.

- Cultural development criteria: difficulties inherent in a cultural environment that is perhaps not fully prepared to absorb innovations of this kind.

The crucial point, which was constantly at the core of the discussions, was that of the costs generated by the introduction of these innovations and the capital outlay required, at the very time when the financial, material and human resources available to African universities are manifestly inadequate for them to fulfill the mission assigned to them. It was generally agreed that for those of them whose authorities decide to forge ahead, what is called for first and foremost is a genuine political determination on the part of the State, together with the mobilization of the energies and resources of the university communities concerned. Moreover, they will have to have recourse to the aid and experience of the international university community and rely on joint projects such as those described at the Seminar: UNITWIN and UNESCO CHAIRS, UNISAT, "POST OLYMPUS", Volunteers in Technical Assistance (VITA), the CODE Data System, and other mechanisms such as TCDC.

#### (d) Conclusion and recommendations

Many of the participants expressed their satisfaction with the demonstrations and with the practical experiments they were able to engage in. Several participants spoke during the summing-up session of Sub-theme IV, declaring that:

- It would be a pity if African universities did not take advantage of these technological advances in order to try to bring about a rapid and significant improvement in the quality and relevance of university education, training and research.

- African universities should resolutely look ahead and profit from the contemplated restructuring to incorporate these innovations in a judicious, reasonable and progressive manner. That is to say:

i) NT should not give the impression of taking precedence over formal lectures, but should be seen as a useful and necessary adjunct to them.

ii) NT must be introduced in accordance with a methodical programme established in conjunction with the target groups and protagonists concerned, specific training courses being organized and detailed information being made available to all.

In this perspective, the wish was expressed that:

- a few pilot operations should be launched without further delay where the context appears at the present time to be most favourable and propitious. These operations could be backed by existing relay centres in Africa such as the SYFED centres, the one in Dakar having already proven its worth in respect of its organization, its aid, co-ordination and leadership potential, the high level of participation and assiduity of teachers and research workers, its relevance, and the essential role it plays in the Cheikh Anta Diop University. The Donogh O'Malley Regional Technical College in Ireland is also prepared to play a part in pilot projects.

On these assumptions, it was recommended that:

- A particularly rigorous preliminary study be undertaken of the adequation and adaptability of these programmes to the needs to be met and to the specific and practical circumstances in which they are to be put into effect.

- So far as is possible, the education and training content and the choice of suitable teaching media be prepared on a regional scale so as to rationalize the costs of production, circulation and use.

- Recourse be had to high-level pluridisciplinary teams for the preparation and implementation of this process.

- The target groups (research teams, teachers and students) be brought into the picture at every stage of the process of defining teaching needs, selecting the curricular modules and media or categories of media to be employed, and the production and finalizing of instructional material.

- Efforts be deployed to help strengthen North-South and South-South co-operation, the joint design and application of curricula providing an excellent opportunity for interactivity in this respect.

Lastly, the Rectors and Vice-Chancellors present appealed for solidarity on the part of the international community (the United Nations System, funding agencies, and bilateral and multilateral English-speaking, French-speaking, Portuguese-speaking and Arabic-speaking co-operation agencies)

without which African universities, in their present difficult circumstances, will not be able to conduct the desired pilot operations in the short term, nor will they be able to envisage, in the medium and long term, the introduction of NT for the benefit of the African community as a whole.

#### F. SIXTH PLENARY SESSION

##### ROUND TABLES ON INTER-UNIVERSITY CO-OPERATION

Chairpersons : Professor S. NIANG and Dr JONATHAN

Round tables took place where presentations were made by representatives of the following institutions involved in the programme of co-operation in the field of higher education as indicated overleaf :

a) Mr POWER, Assistant Director-General in charge of Education, UNESCO and Mr AGUESSY, Head of higher education in the Organization's regional Education Office in Dakar, presented the UNITWIN programme and its UNESCO Chairs component. This programme, initiated on a worldwide scale, aims at reinforcing cooperation between higher educational institutions and more specially at making full use of North-South and East-West co-operation. It is based on the promotion of better integration of higher education into the economic contexts, and on the strengthening of national capacities through twinning of institutions. UNITWIN and UNESCO Chairs can help to bring about the rapid transfer of knowledge by means of tailor-made programmes that correspond to specific needs and can be taught on the spot at the sub-regional level. The UNESCO Chairs were created in many African countries in many key disciplines. The organization has declared its readiness to support projects that will be submitted to it for the creation of Chairs on the basis of established criteria and with extra-budgetary sources of finance.

b) Professor OUIMINGA, Secretary-General of the African and Malagasy Council for Higher Education (CAMES) described the programmes of his Organization and their contribution to co-operation in the field of higher education in Africa and Madagascar, namely, the programmes on equivalence of qualifications, research in the field of pharmacology, and on the evaluation of teachers and researchers for promotion to various academic posts.

c) Professor M. GUILLOU, Rector of AUPELF/UREF, an association of 260 partially or entirely French-speaking universities and research centres in Europe, Africa and Canada, spoke about the programmes of his association. They are aimed at reinforcing the capacity of member institutions and comprise:

- i) Programme "Viatique" - Gifts of specialized books to institutions for distribution as prizes to students, teachers and researchers for academic excellence,
  - ii) Research and Training Programme.
  - iii) Student Exchange Programme (CIME, and Scholarships for excellence).
  - iv) Programme UNISAT and University by satellite.
  - v) Regional Courses Programme.
  - vi) SYFED Centres, and
  - vii) An out-reach programme to other linguistic spheres of the world by departments of French Studies.
- d) Mr NDORUKWIGIRA, representative of the African Capacity Building Foundation (ACBF) made the following points regarding his Organization's aims and activities in initiating programmes for endogenous capacity building and in those of economic planning and development management. The Foundation ensures the promotion of management institutions, in particular in the field of analysis of economic crisis, and contributes to the creation of development institutes. It had just approved six requests for the reinforcement of institutions and the creation of regional institutions.

In the course of the discussion which followed the presentations, Vice-Chancellors and Rectors obtained complementary information on the operation of the various programmes, in particular their financing and modes of intervention. They expressed the hope that the programmes will receive the support of financing agencies and of states, and recommended the establishment among themselves of co-operation to avoid duplication of services.

They also reaffirmed their faith in co-operation in the field of higher education, in particular among African institutions on the one hand, and between them and bilateral as well as multilateral financing sources, on the other hand.

#### CLOSING SESSION

Presided over by Mr Magued DIOUF, Senegalese Deputy Minister of State Modernization, Technology, Labour and Professional Training, the closing session was addressed by five speakers.

After the presentation of the main ideas of the Dakar Declaration on the restructuring of African Universities by

Professor K. F. SEDDOH, Rapporteur General of the seminar, Professor NIANG, President of the seminar, recalled some of the salient results of the discussions, and thanked all those whose contribution made the Dakar meeting possible.

Professor HENDAOU, Vice-President of the seminar then spoke on behalf of all the participants. He expressed his joy that seminars like that of Dakar constitute moments of privilege to reflect on the future of African universities. He thanked the Senegalese government, the University of Dakar, the Director-General of UNESCO and those responsible for the Programme "Priority Africa" for providing the necessary favourable conditions, which made it possible for the seminar to achieve its objectives.

In turn, and on behalf of the Director-General of UNESCO, Mr POWER, Assistant Director-General of UNESCO in charge of Education thanked once more the Senegalese government as well as the AAU and AUPELF/UREF for their contribution to the success of the Seminar.

For Mr POWER, the Accra and Dakar seminars are important steps taken by Vice-Chancellors and Rectors of African Universities for the development of higher education in Africa. The Dakar declaration agrees with the principles established by UNESCO for the improvement of this level of education. It is fortunate that it rightly insists on the importance of quality in the field of teaching and research. Quality will enable the university to bring its contribution to development; and that is the reason why stress must be put on the selection of the best in the policy of university admission, while, however, particular attention is habitually given to less wealthy groups.

Mr POWER added that the final report of the Dakar seminar will be valuable for the preparation of the next UNESCO Programme and Budget. In spite of the critical economic situation, UNESCO will pay particular attention to projects submitted to it, in particular those connected with the UNITWIN programme and UNESCO chairs.

In his closing address (Annex V), Mr Magued DIOUF, recalled the principal themes of the Dakar seminar and made suggestions regarding those subjects which constitute key fields for the development of higher education on the African continent.

As regards the modalities of admission, he observed that diversification of courses would facilitate an orientation which should allow students to choose sufficiently attractive courses because of the employment opportunities they offer.

Considering the renovation of post-secondary structures, Mr DIOUF called on university institutions to open out to society, take into account the aspirations of the people and suggest solutions to the many problems assailing the continent.

Universities should be concerned with more functional groups of disciplines and opt for flexible systems which will allow the creation of a range of options in order to reduce the risk of global failures when the best orientation has not been adopted from the beginning. Modern communication techniques and multi-media materials should increase productivity in education and training, he added.

Mr DIOUF ended his address by congratulating all those who had worked for the success of the seminar, expressing the hope that all the recommendations of the Dakar meeting would be given the greatest attention by the various governments.

**THE DAKAR STATEMENT  
ON THE  
RESTRUCTURING OF THE AFRICAN UNIVERSITIES**

1. The Dakar Seminar on "Restructuring of the African University" was organized by UNESCO within its Priority Africa Programme from 19 to 24 November 1992, with the collaboration of the Association of African Universities (AAU) and the Cheikh Anta Diop University of Dakar. It is the second of a series of three seminars on Higher Education in Africa designed to bring together African Vice-Chancellors, Rectors and top-level administrators and to provide them with the opportunity of finding ways and means of overcoming the obstacles which have been preventing the African University from taking its place as a partner in the efforts of the African continent to emerge from its situation of under-development. The obstacles identified at this Seminar in relation to its main theme are as follows:

- a) the increase in student enrolments exceeds intake capacities and available human and material resources.
- b) the financial means are insufficient for the accomplishment of the important mission vested in African universities.
- c) the existing organization and structures of African universities considerably reduce their chances of success.

**Student enrolment policy**

2. The aspiration of African universities to achieve the requisite standard of excellence in training and research, requires them to regulate their intake through a realistic policy conceived by the academic authorities in close collaboration with the political authorities. Such a policy must combine a judicious selection of students for admission with students guidance based on the diversification of courses within the entire system of higher education considered as a coherent whole. Consideration should be constantly given to the job opportunities and the requirements of the labour market, the possibility of occupational mobility and preparation for self-employment.

3. Special attention should be given to improving the access to higher education of girls and young people from under-privileged backgrounds and refugees.

4. Inter-University co-operation, with emphasis on the creation of regional courses and centres of excellence, should make it possible to pool efforts to teach specialized high-level courses at reasonable cost. Specializations should be undertaken with the use of new technologies such as distance education and new structures, like the open university.

### Financing of Universities

5. The financing of universities must form part of plans strictly based on long-term requirements, the objective being to meet priorities which have been set while at the same time maintaining a balance within each university.

6. Financial autonomy, based on actually available resources, is the most coherent form of management and is the best suited to facilitate the diversification of sources of financing.

7. Certain sectors which have for long been neglected, such as documentation, research, the training of teaching personnel and the maintenance of equipment, should be given preference, if need be by the allocation of quotas.

8. Maximum transparency must be observed in management, especially with regard to the preparation, submission and allocation of budgets.

9. Furthermore, steps should be taken to promote the development of universities and higher educational establishments of a high standard to be financed by private sources. Such establishment will enable the private sector to complement the facilities provided by the State.

### The restructuring of African universities

10. The Vice-Chancellors and Rectors consider that the renovation of university structures is a necessary condition for the attainment of the development objectives of an efficient higher education system. This renovation should be supported by new strategies of training for development. Precedence should be given to the renewal of teaching and learning methods and techniques, the creation of vocational training courses, and the establishment of potentially-creative research and development structures.

11. Within higher educational institutions, participatory combined-operation structures should be created and strengthened by internal and external networks. One important aim, among others, would be to restore the cultural role of the university campus, which should, in turn, co-ordinate efforts among the partners involved and create a peaceful setting conducive to development.

### The use of new technologies

12. African universities will attain their objectives by looking ahead and incorporating in their concepts and methods, new technologies, for example distance education, data processing and communication.

13. These new technologies must be carefully chosen and aided by teaching and learning techniques of a high standard designed for large regional units by competent pluridisciplinary teams including teachers and research fellows with experience from developing countries.

14. The constitution of networks of training and research institutions while helping to reduce costs, will also facilitate the pooling together of experience and know-how so as to master the administrative, technical and pedagogical aspects of the use of these new technologies. These networks should be associated with UNESCO's UNITWIN programme and its key component, the UNESCO Chairs.

#### The mobilization of the international community

The strengthening of higher education in Africa calls for a mobilization and an awareness on the part of the university community itself, backed by a genuine political will on the part of the States concerned and by aid from the international community, principally through United Nations Agencies (UNESCO, UNDP), various sources of funding (the World Bank, the African Development Bank), and the contribution of various groups such as the British Commonwealth and "Francophonie".

**Address by Professor Souleymane NIANG,  
Vice-Chancellor of the University Cheikh Anta Diop, Dakar**

Your Excellency, the Minister of Education,  
Ladies and Gentlemen,

The economic and social structures of most African countries, especially countries subjected to continued "adjustments or readjustments" are in such a weak state that it has become necessary for the United Nations to envisage a special recovery and salvaging programme for those sectors in permanent crisis.

In support of this initiative, UNESCO adopted a plan of action "Priority Africa" of which one of the primary objectives is the restructuring of the management of institutions of higher education for a better functioning and more efficient training of national personnel for development.

To this effect it appears that the basic tools for economic and social development of a country are first and foremost universities and other institutions of higher education, tools that must continually be refined for optimizing the effectiveness of training strategies.

Now, it appears that structural policies in Africa, the observable effects of which are not always positive, have postulated "ex cathedra" the marginalization of higher education, particularly universities, in favour of elementary education. This has happened at the very time another basic postulate has been stated, with good reason, for other continents, the priority that must be given to higher education and Universities in every coherent process of national development and the urgent need to give these Universities sufficient resources and means for their mission of training men.

This discrimination between the "adjusted" and their "adjusters", clearly established and constantly re-affirmed is obviously unacceptable. It has been vigorously contested but unfortunately, it will remain for a long time the subjugating rule.

The negative effects of this imposition have, however, led to the reappraisal of these postulates. Fortunately, today, a unified and global theory has been elaborated and adopted, the basic axiom making the university, wherever it is, the prime factor in every development and placing it in a privileged position in the local or regional models of economic and socio-cultural recovery.

This new basic notion of development has led to the reappraisal of the problems of University education on our continent, and especially of those universities that have been completely shattered and, even at times, disrupted by adjustment policies to such a point that they are often, here and there, in a severe state of disfunctioning.

Doubtless the dynamics of this all embracing axiom, those of integrating the university dimension of UNESCO's programme "Priority Africa", that we, African Vice-Chancellors, Rectors and other authorities of higher education, are meeting in Dakar, after the Accra meeting, to reflect on the modes of restructuring our Universities and Schools in order to help endow them with real "poles" of competence and creativity for development.

The development in question is defined as a continuing improvement of the quality of living of people within an enlightening, physical and socio-cultural environment. This naturally raises "the problems of educational and cultural levels that are necessarily linked to the degree of democratic freedoms to be created within areas of secured peaceful and open growth policies"\*..

In general, this notion of development is equivalent to that of a development conceived as a two dimensional democratic space with a component that is internal, moral and humanistic, and another external, physical, scientific and technological.

The dimensions of this type of development presuppose that the society possesses humanistic structures for a better capacity for people to assume their social and moral responsibilities and scientific and technological structures for the elaboration and transmission of knowledge for the physical development of man.

Consequently it is up to the University, through its own education and training mission to offer each individual the possibility of self-accomplishment for the good of all, within democratic environment of growth and academic freedom.

African Universities are not yet equipped to exercise at present this development function; their resources in general do not allow that and much less their status and their environment. There is therefore reason to look for ways and means of modifying in a significant manner this environment and this status in order to equip institutions of higher education with autonomous and higher creative university status and open humanistic fields of joint development, cooperation with areas of solidarity, exchanges and conveyance for the mobility of people within the framework of a bold reorganization of administrative and academic structures of management. These organized areas of autonomy will

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\* S. NIANG - Discours inaugural du "Cours Multidisciplinaire Universitaire d'Education au Développement; Université de Rome - décembre 1991

have to be areas of stable peace and academic freedom for quality research and training, areas implying for their emergence, "the existence of external political spaces of scientific impulse"\*\*\* similarly organized.

Our universities therefore, have to change through specific transformations into true development universities with the requisite concentration of competence for the refined training of national elite, "the real problems of Africa being first and foremost how to become a producer of science and technology"\*\*\* and not only a consumer. This means that Africa must become, thanks to training and high-level qualitative research, a cultural field for scientific extension and transfer of knowledge and not a closed field only for so-called "endogenous" technologies of which one of the prime and adverse effects is that it hides a state of persistent under-development; and it is used as an argument if not an easy slogan by a number of pseudo-development theorists who are more concerned with their status as international experts than the quality of their expertise.

This being the case, which "poles of competence", which structures and which courses should be created? For which teachers and which students? With what resources and what means of management? With, or for, what cooperation? And in which open spaces of communication and concertation?

These are some of the difficult problems to solve and on which we have to reflect together. There is no doubt that our exchanges will be fruitful and that ways of achieving for positive solutions will be found. That will surely be the case if the University world is equipped with structures respected by all; if the structures are defined in such a manner that the democratic spaces of academic autonomy, truth and freedom are available for training and research development.

To conclude, I wish to thank, first of all, UNESCO and its Director-General for their important role of continuing participation in the elaboration of educational policies for development and for their decisive contribution to the organization of this second meeting of African Vice-Chancellors and Rectors. I am pleased to welcome here the representatives of the Director-General whose sustained efforts have led to the Dakar meeting.

I also wish to welcome the representatives of all countries and international organizations who have supported, and continue to support firmly, by a policy of open cooperation the efforts of our universities and our schools of higher education. Allow me to welcome especially the representatives of the friendly country which has built up the University of Dakar, directed and assisted it to develop positively to its maturity, and still continues to support and help it to consolidate its work in its field of responsibility.

\*\* S. NIANG - L'Université du Développement, son rôle et sa mise en oeuvre locale PUD; décembre 1990

Finally, I wish to welcome the authorities of African Universities, Presidents, Vice-Chancellors, Rectors and other representatives. I welcome the professors, members of international scientific organizations and all those who have come to take part in the seminar. To all of you, I say "welcome and a happy stay in Senegal".

Address by Mr Eric ARMERDING, Representative of the  
Director-General of UNESCO

Your Excellency the Minister of Education,  
The Rector of Université CHEIKH ANTA DIOP,  
The Vice-Chancellors of African Universities,  
Your Excellencies,  
Ladies and Gentlemen,

I - INTRODUCTION

I am pleased to greet you, on behalf of the Director-General of UNESCO, Mr Federico MAYOR, and to bring to you his best wishes for the success of this seminar on restructuring which is the second of a series devoted to the management of African Universities within the framework of the UNESCO programme "Priority Africa".

Mr MAYOR regrets he is unable to join you on this occasion. You know better than I that he gives priority attention to higher education in Africa, and so awaits with great interest the results of your discussions. Indeed, he counts on you Vice-Chancellors and Rectors of African Universities to play an important role in the action in progress for major changes in the management of your institutions of higher education. These changes will have a bearing on the process of lasting development itself, and they must be brought about even if there is resistance from certain groups of decision-makers. Their contribution to the future of Africa and her societies is so important that they should be fully supported. Mr MAYOR has asked me to state here the great hopes he nourishes for the success of this series of Seminars and to reaffirm his confidence in your ability to promote the changes that are so necessary for higher education in the Africa region.

Ladies and Gentlemen,

It seems perfectly right that this meeting on the restructuring of African Universities takes place in Senegal, a country whose Cheikh Anta Diop University which is offering us its hospitality today, is the first of francophone universities in sub-Saharan Africa, and to which a good number of high executives now working in our countries owe their training. It has remained, over the years, one of the leading institutions of our continent, and now has the young university of Saint-Louis to complement its work.

This dynamism of Senegalese higher education has contributed to making President Abdou DIOUF one of the promoters of the search for true integration of our African Universities, which is the sole means of increasing their participation in our continent's development. In this regard, the recent conference of Vice-Chancellors of francophone and lusophone universities of ECOWAS countries, has decisively paved the way.

Besides, about some eighteen months ago, UNESCO convened here in Dakar the Conference of Ministers of Education and Educational Planning (MINEDAF VI), presided over by His Excellency Mr André SONKO, Minister of Education of Senegal. This Conference laid particular emphasis on the importance of strategies capable of reinforcing literacy and basic education during the last decade of this century. At the same time it recommended the strengthening of higher education with a view to providing a bank of ideas and knowledge which will help to ensure the development of education and society itself.

In this context, the seminar whose opening session you are chairing, Your Excellency the Minister, is in direct line of the expectations of MINEDAF VI, and constitutes a confirmation of UNESCO's efforts in the past three decades, to promote international co-operation in respect of a higher education which meets the present, and shall meet the future needs of Africa. Thus, through its programme "Priority Africa" and with the co-operation of the Association of African Universities, UNESCO has, once more, brought together the principal actors in the field of higher education in order to afford them a forum for reflexion and discussion in which they can, on the one hand, make a thorough analysis of trends in and most urgent problems of, African Universities and, on the other hand, set forth the strategies and orientations to adopt to bring about the necessary changes.

## II - RECENT MANIFESTATIONS

Other occasions have already made it possible, as you are aware, to analyze the principal trends and present weaknesses of higher education in Africa, to indicate measures for improving the quality and the relevance of that level of education and to situate its role in the service of African societies the solution of whose problems constitutes one of its principal objectives. The aspiration of higher education to assume this role implies the permanent deepening of the system of development indicators on the one hand, and assumption by higher education of a leading position in diagnosis of the situation and the identification of priorities on the other hand. It is on this basis of taking into account the great orientations of development, of the evolution of policy, of the systemic involvement of indicators of development, that a long-term coherent plan of action was elaborated, together with strategies and clearly defined priorities, the examination of whose different axes will make it

possible to appreciate their nature and importance with regard to the structures, contents and orientation of the courses and the training and research programmes.

These axes contain four fields in which a major effort must be assumed by the African University Community, namely : a) relations between higher education and employers of future graduates ; b) a constant analysis of crucial problems, which implies the existence of mechanisms to ensure that there are exciting tasks for the academic community ; c) innovations and reforms ; and d) the assembling of resources. It is in accordance with this impressive agenda for the future of higher education in Africa that UNESCO has initiated, in the framework of its programme "Priority Africa", the present series of seminars on the management of African Universities. For, it is at this basic stage, in the institutions themselves, among the academic community itself, that the stimulus towards change and improvement must begin.

### III - RESULTS OF THE ACCRA SEMINAR

The first seminar of the series took place in Accra just a year ago. It was very important not only because of the theme discussed, namely the mission of African Universities, but also because it assembled for the first time, under the auspices of UNESCO and in the framework of its programme "Priority Africa", all the academic heads of the continent.

In his opening address, Mr MAYOR stressed that the mission of the African University must be evaluated, for the institutions of higher education are not adapted to the societies of which they form part. It is therefore urgent to examine the models which suit better the needs of the African society ; the African University being in conflict with a prolonged "crisis of conscience" which is polarized especially on its identity, its functions and the human, financial and material resources it possesses for development, and which is imputable to the difficult economic and social situation now prevailing in African countries.

If the University recognizes the needs of the society and of the state, it can accomplish a mission of the highest importance through its teaching, training, research and service to the society. You expressed very clearly this challenge in Accra, and on that occasion you declared your readiness to work together in order to ensure that the ideals laying the grounds of that mission are translated into concrete and efficient action in the management of universities.

In fact, the Legon Statement, adopted at the end of the Accra seminar stated with conviction and loud and clear your intention to adopt a sustained and vigorous approach. I am certain that this spirit and enthusiasm are even stronger today as we face the tasks of the second seminar.

#### IV - THE DAKAR SEMINAR

Ladies and Gentlemen,

In the four coming days, you will examine complex questions - which give evidence of your will to act. The questions concern: a) policy and modality of admission ; b) planning and allocation of resources ; and c) structures of post-secondary education. It is not UNESCO's intention to prejudge your conclusions. Besides, as presentation of objectives and of the programme later on, will go into detail as regards each of these three themes, I shall limit myself at this opening session to some brief remarks and raise some problems.

##### (i) Policies and modalities of admission

As far as the first sub-theme is concerned, you will discuss delicate questions at the centre of a dilemma which is not only African but worldwide - namely the growing demand for higher education and urgent necessity to give advice to future graduates to undertake professionally useful and profitable courses in general education.

Moreover, it will be necessary to ask questions on the course contents as well as the teaching methodology in use. Do these meet the basic needs of the region as regards lasting development ? Do the courses have quality and relevance - which have become the criteria of a good university education nowadays? Is there a regular and sincere dialogue between national higher education policy-makers and institutional heads ?

An answer in the positive to the last question is necessary if the university wishes to ensure that national forecasts of employment are undertaken and that it is able to orient students in directions leading to work and professional activities. Of course, there are many things to do to build up a higher education whose contents and degrees equip Africa for the third millennium.

##### (ii) Planning and allocation of resources

The second sub-theme will provide the opportunity for tackling the most difficult questions of all educational levels, including higher education, nowadays : I mean the question of human and material resources. Have African countries efficiently planned resources available for higher education, now and for the near future ? Have the universities themselves adopted strategies for the judicious use of limited resources ? What are the model institutions, in this respect, which can give useful lessons to their colleagues ? What possibilities are there for mobilizing supplementary resources? This needs an analysis of the capacity of universities to develop the spirit of entrepreneurship in their relations with their societies. How course programmes should be prepared within limited resources ? This question

stresses, once more, the difficulty to ensure the quality and relevance of university products in the present economic climate.

Of course, the question of "Resources" constitutes the most difficult question for each country today. Hence, in the context of the crisis that is strangling the economies of African states, draconian solutions will be needed in your management. The exercise will be hard but beneficial if rational use of resources are assured.

### (iii) Post-secondary educational structures

The third sub-theme of your discussions will centre on post-secondary educational structures. The links between this question and the first two points are clear.

Before proposing any change, the academic community must first of all agree on the contribution of universities to the development of Africa. This aspect recalls your Accra discussions on the mission of institutions.

In Africa, the importation of classical foreign models continues as far as the university is concerned, while industrialized countries are operating a change of the structures of their own higher educational institutions.

In order to study as a whole the best structures for African universities in the twenty-first century, it would be advisable to orient your discussions in three directions towards : first, the remote past of Africa, the period of its rich and indigenous traditions ; secondly, the more recent past, taking advantage of experience of building independent nations, each with its own specific identity ; and lastly, the future of the region with a view to forecasting the eventual challenges of the coming millennium and the role of higher education in this new period.

Ladies and Gentlemen,

The challenges always exist ! Let us not underestimate their complexity, but with courage and determination, we can together undertake this task which is so necessary for the future of higher education in Africa.

## V - CONCLUSION

Ladies and Gentlemen,

UNESCO is ready to study the needs and demands of Africa. This continent continues to be one of its priorities; and the programme "Priority Africa" is a testimony of UNESCO's will to collaborate closely with member countries so as to solve the difficult problems which stand in the way of a lasting development of the continent. In this respect, higher education and reinforcement of African Universities occupy an important place in UNESCO's present activities.

One of these activities is the UNITWIN project and its key component, the UNESCO chairs programme. Their aim is to facilitate an efficient co-operation among African universities themselves, and with universities in the world in order to ensure the rapid transfer of knowledge.

This project has been surprisingly successful since its inception a year ago. UNESCO is seeking your support and participation in this initiative which aims at ensuring the creation, transfer and equal distribution of expertise and technology, essential elements of lasting development.

UNITWIN will contribute towards the maintenance and reinforcement of your centres of excellence on the continent ; at the same time, it will encourage your contacts with the international academic community. This will enable your specialists to participate in discoveries which favour the comprehension and, of course, the solution of global problems.

No one doubts that the principal trend in higher education in the 1990s and for the coming century will be internationalization, which implies more mobility, more contacts and more co-operation among university teachers. Their institutions must benefit from this trend. Africa must participate in this progress in a manner which lessens rather than worsens the problems.

To conclude, I wish to express UNESCO's thanks to all the organizations which contributed to the success of the seminar : the UNDP, the Commonwealth of learning, the Agency for Cultural and Technical cooperation, the African and Malagasy Council for Higher Education and non-governmental Organizations like the IAU and the AUPELF. I wish to greet especially the Association of African Universities, the first partner of UNESCO in this work, which, by reason of its long and wide experience, has contributed so much to the analysis of the basic questions of higher education on the African continent and to the elaboration of concrete strategies to solve them.

And how would I not, in these circumstances, recognize the debt we owe the eminent Professor Souleymane NIANG, Rector of Cheikh Anta DIOP University of Dakar, whose cooperative spirit and the dynamism he has instilled into his staff for the preparation of this meeting, augur well for the success of our series of seminars.

And, as for your Excellency the Minister of Education, who have always stood by UNESCO on the occasions of great educational meetings, we send through you our sincere thanks to the Government of Senegal for its hospitality, and we know UNESCO can always count on your support.

Ladies and Gentlemen,

As in Accra, the conclusions and recommendations of your discussions are awaited with much interest. UNESCO reaffirms its willingness to contribute to the realizations of the solutions you will propose. Together we'll prove that it is possible to achieve many things even with little means.

I wish this seminar full success, and thank you for listening.

Address by Mr André SONKO, Minister of Education of Senegal

Ladies and Gentlemen,

I wish, first of all, to welcome the Heads of African Universities assembled here this morning, and the representatives of associated international organizations to this second Seminar of Vice-Chancellors. The Dakar meeting, after that of Accra, will provide the opportunity for stating precisely the reforms needed by our universities to perform effectively and fulfil their mission better.

The diagnosis of the disease of African Universities has already been made; and it is the subject of a wide consensus, even though there still remains to refine this, or that, aspect of it. I wish to recall briefly the guidelines.

First of all, we cannot but be struck by the low internal output of our university systems. This is due to many reasons all of which traceable to the worsening working conditions of students and teachers, a situation expressed most vividly by the abnormally high proportion of failures in examinations, the considerable number of dropouts and the high rates of repeaters.

The rapid increase in student numbers is, in part, the cause of the overpopulation in our faculties, and most especially the first years. A liberal admission policy in a difficult economic environment that limits increases of resources, leads to difficulties and causes bad functioning. It is, therefore, necessary to control admissions better, ensuring however, that measures taken do not produce adverse effects in the long run. A strictly malthusian policy in this matter may seem tempting, but it is not certain it is actually in the best interest of our countries. All things considered, our student numbers are not excessive. The needs of staff, research fellows and senior technicians are all far from being satisfied, and it will be paradoxical, indeed, if at a time the general tendency in industrialized countries is to raise the level of training of economic agents, developing countries move in the opposite direction.

So, more important than the control of admission is, in my opinion, the control of numbers already in institutions. This means fighting against failures, and not being satisfied with the more or less obscure mechanisms of selection and orientation involved. It also means, among other things, placing students in a favourable learning environment and offering them sufficiently

varied courses to enable each one of them develop his potentialities. The wherewithal to do this, is, of course, needed.

The present economic situation and concern to balance national budgets render improbable an increase of resources allocated to higher education today. However, it is possible to use allocations well. A more strict management can certainly produce favourable results; and so we have to work in that direction. Above all, it is urgent to redefine the structure of the resources our states agree to make available to their universities.

In this regard, it is becoming increasingly clear that the share of transfers and subventions of a social nature is indeed too high, and that its constant increase has taken place at the expense of investments, and pedagogical work taken in its widest sense. We inherited a situation, created soon after independence, at a time when strengthening national personnel was a priority. It was then normal that our young African states make as attractive as possible the training they required of their high school certificate holders before entrusting them with posts of responsibility.

It is no more a matter, thirty years after, of creating vocations, but of enabling the greatest possible number of students to pursue higher studies, since it is agreed each one of them, like any other citizen, will contribute further to the cost of his own accommodation, food and health. I am not advocating a total disengagement of the state from university life and work, or that of students aid donor organizations. But there certainly is a just balance to find between a policy which swears by nothing but the truth of prices and the all powerful market forces, leaving the poorest and the weakest in contempt of national solidarity and democracy on the one hand, and a policy of subsidy which, because of the lack of proper judgment, leads to the deadlock we know today. It is, in any case, I think, a subject for reflexion, a subject to explore.

But, if a better definition of the criteria for university admission and a better allocation of available resources are likely to increase the internal output of our faculties and institutes, it still remains to improve their external output.

Of what use, in fact, are a more satisfactory functioning of the university, a flattering rate of success in examinations, a greater number of graduates after a few years of studies, if the university operates, in isolation and works only to reproduce itself through successive generations, if the degrees it awards only sanction its own excellence, and if the students it produces are found inadequately prepared for integrating into active life the day they begin that process?

We have inherited - at least in Francophone Africa - a model from the nineteenth century when a university's essential vocation was, according to BOURDIEU, to give "heirs" the general knowledge they came to seek without caring much about professional integration, which was a foregone conclusion at their birth. This model, of course, developed, but we may doubt if it did so sufficiently when we know the number of our graduates who are condemned to unemployment.

Although it is a fact that the best university reform in the world will never create a single additional job on the labour market, we may still wish to call on the university to put professional training at the centre of its preoccupations. I am advocating the diversification of courses. Prominent among them should be established professional studies. But, there still, we must avoid moving from one extreme to another, and sacrificing the long-term for the short-term.

The effort of adaptation required of university training takes place in a changing economic world. The profiles of jobs change. Some of them disappear. Others, unknown up to now, will appear; we have only a very hazy idea of them now. In these conditions, adaptation of training must integrate the fact that present day graduates will see their jobs develop, and that they will even have to change their jobs several times perhaps during their career. Degrees must, therefore, guarantee that their holders are capable of adapting themselves to new working conditions, acquiring new knowledge and know-how, adopting new behaviour, and capable of doing many things which a solid basic training qualifies an individual for doing. Such training rejects narrow specialization and calls for interdisciplinary courses without necessarily falling into the hollow generality of a "passe-partout" methodology.

Hence, the interest there should be in increasing relations between the university and the economic world. Be it a question of conception, production, or management, it is necessary that enterprises make known their training needs, that they contribute to define the modalities and take their part alternatively in actual training. In response to this, there should be on the part of the university an equal effort of listening and collaboration provided that it valorizes the capital of expertise it possesses and involves itself in the continued training economic actors will need constantly.

The points above are obviously mere headings which need further development I have no doubt you will, in the course of your discussions, have the occasion to come back and bring useful additions to these questions and throw more light on them.

To conclude, I wish to thank, on behalf of the President of the Republic, on behalf of the Prime Minister and his government and on my own behalf, all those who have worked for the success of this seminar. My thanks go in particular to UNESCO and the Association of African Universities, co-organizers of this meeting, and untiring promoters of South-South co-operation.

We base much hope on the programme of action "Priority Africa" proposed by the Director-General of UNESCO, and are certain that it will embody the reflexions carried out at the level of our states. Senegal will, as far as it is concerned, draw inspiration from these reflexions to nourish a national consultation convened on higher education by the Head of State.

Wishing full success in your discussions, I declare open the second Seminar of Rectors of African Universities.

**PRESENTATION OF THE OBJECTIVES  
AND PROGRAMME FOR THE SEMINAR  
(By Mr E. ARMERDING)**

1. In December 1991, in Legon, Accra, the first of a series of three seminars spelt out the various aspects of the vocation of African universities. The current meeting, the second, is concerned with the consequences of the responsibilities resulting from this vocation, those of renovating the structures of universities as well as their programmes and methods.
2. In attempting to elucidate the many problems arising from the themes for this seminar, one might be guided by two main methodological principles which served as the basis for the consultation by experts on the trends and issues at stake in African University education in the twenty-first century organized by UNESCO at this very place, in Dakar from 28 February to 1 March 1991. The first principle is the need to consider the long term in our analyses. The second is the requirement to take into account the major orientations of development and economic management without forgetting to apply the systems approach which should help to define the landscape of the research to be undertaken.

**THEME 1 - POLICIES AND MODALITIES OF ADMISSION**

3. The final report of the Accra seminar indicates that among the problems met by the University is the unjustifiable separation of disciplines, a problem underlined any way by Mr Federico MAYOR right at the opening session. The Director-General, in fact, attaches great importance to this question which he had previously raised at the Ninth General Conference of the International Association of Universities held in Helsinki in 1990. He had, on that occasion, stated that university institutions traditionally organized on classical lines in terms of separate disciplines are now faced with a real structural challenge because of the rapid increase of knowledge which imposes an interdisciplinary approach. It seems absolutely essential to work for conditions of maximum coherence in the data that pile up in a disorderly manner; for each discipline, while adding considerably to content, is running the risk of contributing to excessive fragmentation of knowledge as a whole.
4. As regards the large number of students in different branches of learning in higher education, I would like to quote from a document entitled "The Experience of BREDA" presented at the Accra seminar by the UNESCO Regional office in Dakar:

From 1975 to 1988, the number of students in the African region has progressed in a relatively constant manner "from 820,000 in 1975 to 2.2 million in 1988; this represents an increase of 168% ; the proportion of registered women has also increased, from 25% in 1975 to 31% in 1988". Concerning Sub-Saharan Africa, from 1975 to 1988 "the total number of students has grown from 200,000 in 1975 to 700,000 in 1985, this represents a growth of 285% ; the proportion of registered women has constantly increased, from 17% in 1975 to 26% in 1988 ; as a result of the increase of the number of students, in as much as in the Africa region and Sub-saharan Africa, a high proportion of the population has been registered in senior secondary schools, which means that the growth of the number of students has been stronger than that of the population of the same age-group".

5. Finally, for the whole region, the estimates for 1990 were 2,900,000 students, of which 30% were women. There were wide differences, though, between countries. For example, statistical figures showed 6,328 students for Togo in 1986, and 122,935 for Nigeria.
6. In addition to this unchanging problem of growing number of students, there are the disturbing questions of failures and unemployment; and we should not forget the obstacles to access of women to institutions of higher education.
7. I do not wish to over-play the problem of failures, which may be said to constitute a symptomatic phenomenon of bad planning and management of academic programmes in Africa. Let us say that institutions of higher education generally experience high rates of failure which revolts students; upset parents; embarrass educationists, and preoccupy political authorities. Are they not one of the objective criteria for assessing the efficiency of University education ? The change in pedagogical practice which should be introduced, on the basis of a clearer conception of the imperatives of management of higher education, should take into account the many causes of failures (external and internal) and be directed towards the search for appropriate solutions at the level of structures as well as at the level of human resources.
8. Let us turn to another preoccupation related to large number of students, unemployment. This is one of the frightening consequences of the critical social condition in which graduates find themselves. Even if, in the final analysis, it is not the responsibility of institutions of higher education to secure jobs for their graduates, they cannot remain indifferent to the high and embarrassing rate of unemployment and cannot refuse to question the relevance of the education they provide. Is the trained product adapted to the labour market ? Are the needs for qualified personnel in the public and private sectors, in business and services, well-catered for by higher education ? Is

the personnel required by the labour market limited to the personnel needed by the job market ? Is it not essential to define the imbalance between the numbers of students taking the various courses and the corresponding levels of needs in the labour market ? Should not the problem of the narrowness of the job market be solved by a better conception of the market ? Can we stick to a static position as regards the relation between the appropriateness of training - and employment when we know from surveys, such as that by MINEDAF V, that "the relationships between education and employment are so complex that they defy highly simplified models of quantitative correspondence between the product of an educational system and what, according to predictions, can be absorbed by the labour market ? The operation of this market and especially the ways of recruiting and salary increment as well as the conceptions, attitudes and expectations of students, graduates and employers play a major role."

9. You are obliged to look for innovative solutions to the crucial question of Policies and modalities of admission and deal with the problems of channels, jobs, careers etc. You will take action, bearing in mind perhaps the Director-General's reflexion communicated to the Accra Seminar in the following words : "The objective is that all students should leave the university not only with a degree, but also with a know-how, know-how that should satisfy the requirements of social life, and competences that make it possible to apply this knowledge and to adapt it to a changing world."
10. As far as this point is concerned, higher education must change or perish.
11. I am convinced that the guidance from the working document prepared by Professor AJAYI, followed by relevant purposive planning and management action, will be a lifebuoy with the help of which higher education can be prevented from perishing.

## THEME II : PLANNING AND ALLOCATION OF RESOURCES

12. In spite of the attempts of the private sector directed towards higher education, the trends of which you will have to examine, it is right to acknowledge that in Africa, the government is the major provider of funds.
13. But everywhere, the rate of growth of funds allocated to institutions of higher education is diminishing. There is a freeze or a decrease of resources in real terms. Consequently, there is a shortage of means for studies and research bearing the mark of financial constraints characterized by the reduction in budget allocations

earmarked for education in general, and for higher education in particular. As a result, the preoccupations of higher education, concern priorities in the use of resources and the management of the institutions as well.

14. Most of the time, the greatest part of the allocated financial resources is used in the following order of priority :

- i) salaries,
- ii) scholarships,
- iii) social services,
- iv) maintenance of buildings,
- v) libraries,
- vi) equipment and laboratories,
- vii) loans to students,
- viii) research.

Furthermore, the preoccupation relative to student unitary cost is particularly high in Africa, where the ratio of unitary costs of university teachers to primary teachers range from 30 : 1 to 50 : 1, compared to 10 : 1 in Asia or in Latin America". It is in this connection that governments intervene, demanding not only for a better cost-efficiency ratio and an efficient management but also improved accountability within institutions of higher education.

15. In short, financial constraints call for another method of management to which the working document prepared by Professor GOMA draws our attention.

### THEME III : STRUCTURES OF POST - SECONDARY EDUCATION

16. This theme will deepen our awareness of the necessity to diversify the models of institutions of higher education in order to be more conversant with the development needs.

17. The classical models were characterized by the conception of higher education as far as the university is concerned, as monodisciplinary structures. Should this model, which has been imposed in the course of history enforced within certain socio economic and cultural contexts, continue to dominate thought and action? It is up to you to examine this problem by analyzing it in all its aspects. Perhaps, you would during such an examination, recall the words of Mr. MAYOR, Director-General of UNESCO : "It seems that an imposed history appears to weigh heavily at many points on African higher educational institutions, which appear far from being organically adapted to the societies of which they are a part. The problems are well known : the irrelevance of certain aspects of the curriculum, artificial compartmentalization between subjects,

imbalances in enrolments as between the sciences and the humanities and in the orientation of research, insufficient emphasis on African languages of instruction - shortcomings that create and perpetuate the chronic shortage of qualified personnel for development work. The persistence of inappropriate structures can give the impression that - despite the progress towards the development of an African academic identity since the creation of the AAU in 1967 - the special relationship with the European universities that nourished many of the independent African institutions at their origin lingers on like an unwanted dependency."

18. In this regard, UNESCO maintains two considerations. First, the university model is a formula, among other things, for the organization of the institutions of higher education. A quite big typology of institutions of higher learning - short-term, medium-term and long-term, professional and academic education etc. may be envisaged. Secondly, interdisciplinary courses can help solve many development problems which cannot be elucidated by the monodisciplinary approach.
19. It was with the latter consideration in mind that UNESCO organized, in 1991, an International Symposium on the Interdisciplinary Approach. According to the final report, "the concept of interdisciplinary approach has been accepted as a characteristic of present day society, and its relevance has not been challenged but it has been recognized that its implementation is sometimes rendered difficult by the problems arising from the refusal to participate in certain disciplines such as the human and social sciences as well as natural and pure sciences and some branches of the central government to participate". It is up to the university authorities to identify these obstacles, taking into account the need for an interdisciplinary, or at least pluridisciplinary, approach, and in all cases, major problems of development that exist especially in Africa, and have been identified by the United Nations New Agenda for the Development of Africa in the 1990s : poverty, degradation of the environment due to desertification or to deforestation, social consequences of structural adjustments, conditions of women, and the brain drain. These are global problems which encompass factors of a pluridisciplinary nature. They are also complex, related as they do to both the environment and development as analyzed by the Rio Conference (UNCED). As shown in the working document presented by the Director-General to the Executive Board of UNESCO (140 EX/10), these problems, "are by their very nature, interwoven and transectoral. Therefore, whichever approach is adopted, whatever the target and whatever the professionals involved may be, the society continues to tackle the problems in terms of disciplines and of a sectorisation stemming from systems of higher education which require up-dating."

20. The same Executive Board document specifies that "many governments emphasize the fact that action by the Organization should specially be designed to highlight the contributions of the natural, pure and social sciences, and of education and culture, and to implement the programme "Agenda 21" of the Rio Conference on the Environment. In this respect, much effort would need to be made to ensure co-operation and coordination between sectors and between institutions, especially the latter in order to avoid the overlapping of activities and also to encourage the co-operation with financial institution such as UNDP and the World Bank".
21. These references have been made to the practical results that can accrue to UNESCO's work from orientations defined by the Rio Conference and its programme "Agenda 21", because useful lessons can also be drawn from them for reflexion as one considers the renewal of university structures or, more generally, of all post-secondary education and research. If educational institutions of this level wish to see themselves in the perspective of what they can contribute to the sustainable development of Africa, that is to say of men and women of this continent and of their offsprings, they cannot avoid adopting together a pluridisciplinary approach to global problems and solutions to them. Such a posture cannot be achieved without those concerned undergoing an often difficult mental conversion. The French physicist, Philippe de Gennes, a recent Nobel Prize-winner, has expressed regret that students know theorems but they do not know how to solve problems ; an evaluation of acquired knowledge in the African Universities would, perhaps, lead to a similar conclusion.
22. Let me refer also to the International Conference on Education for All, held in Jomtien, Thailand, in March 1990, and the World Universal Declaration and the Framework of Action it adopted. The two instruments recommended greater effort in research and training at the university level, which would define strategies and supply the necessary teachers for ensure the education, at least, of all children at primary level. The responsibility of the University vis-à-vis secondary education is no less determinative or crucial. The Harare Declaration adopted in 1982 by MINEDAF V\* remains no doubt as valid regarding these points as it is on others. It underlined the need to orient the development of higher education in its organization, programmes and its research activities so as to enable it, by diversifying institutions and increasing efficiency, to make increasing contribution to the development and to the improvement of the educational system.

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\* Fifth Conference of Ministers of Education and Ministers in charge of Economic Planning of African Member States (Harare, 28 June to 3 July 1982) - Final Report, page 45)

23. The "Priority Africa" programme provides two recent examples of the action taken by UNESCO to support efforts of Member States in this regard.
24. The first example is the seminar organized in Lomé (Togo) in December 1990, in collaboration with the Agency of Cultural and Technical Co-operation and the University of Benin, Togo. The very fact that the latter institution of higher education participated in the organization and in the conducting of this meeting on the theme Informatics in the Service of the Development of Education illustrates the role that it hopes to play vis-à-vis the overall system of education. The working sessions and the final report of the seminar have, to a large extent, shown that participants, from 37 African countries, defining the broad lines of a strategy for the introduction of teaching computer science, saw themselves led to point out the need to involve institutions of higher education in both research and training, for example, the training of trainers for which computer science is both a pre-requisite and an imperative, as a discipline, or a teaching tool or an instrument for the management of the educational system.
25. The second example of absolute interdependence among all levels of education is in the domain of distance education that extends from primary to higher education. At a meeting in Arusha (Tanzania) in September 1990, specialists from 33 African states examined, again within the framework of the "Priority Africa" programme, practical steps to strengthen their co-operation at the regional and sub-regional level with the aim of satisfying their needs in the use of different communication technologies for educational purposes. It became clear, as in the case of computer science that the intervention of institutions of higher education in this matter, is indispensable in the planning of distance education systems, the elaboration of programmes and the training of various specialists and evaluation.
26. Other aspects of the articulation necessary between the objectives, structures, programmes and methods of higher education and those of other levels of education have to be considered. Some of them are mentioned in several documents submitted to this seminar for discussion; so is the importance given to qualitative improvement and the necessary quantitative progress of scientific, technical and technological education in secondary schools. All these are an indispensable condition for the development of the training of executive personnel in the productive sector. Similarly the articulation within the same secondary education of the relationship between education and socially-useful jobs can better prepare pupils to undertake training related to the labour market, through, for instance, sandwich courses. And these various orientations can, and must even be initiated right from the primary level of education. Similarly the spreading of scientific

and technical thought in the adult population recommended by the CASTAFRICA II Conference (Arusha 1988) is also a matter that deserves a more favourable consideration by parents before their children can be successfully guided towards branches of study other than the literary, judicial or administrative.

27. These sketchy remarks are meant to illustrate the key role of university institutions in the whole educational system of every country and consequently in seeking solutions to the crucial problems of national development through the entire system and not from the action of universities alone.
28. As regards this total engagement in the cause of development, the working document prepared by Rector NIANG will give us some indications as to the way to follow in order to restructure better the institutions of higher education in Africa.

#### THEME IV : RESTRUCTURING AND NEW COMMUNICATION TECHNOLOGIES

29. It is, moreover, in this spirit that it has been proposed to put in concrete terms the analysis of the questions raised by the restructuring of post secondary institutions and, notably, to expose them, by the use of new techniques of information and communication, to the examination of a problem which is not only global, pluridisciplinary but also particularly severe for Africa today and in the future. The problem in question is AIDs. How, at the level of higher education, would one fight this plague employing a better articulation of disciplines, naturally at the same time within a regional or sub-regional co-operation endeavour which reinforces collaboration among institutions of the United Nations system ? The WHO is particularly concerned with the action to be undertaken. It is useful to consider here the competence and the experience of this specialized institution which has also recommended interdisciplinary action at the level of higher education, in the elaboration and the implementation of a whole strategy of health for all. In fact, as far back as 1984, the 37<sup>th</sup> World Health Assembly adopted a resolution relative to the role of universities in the strategies of health for all. The resolution, addressed to the universities and other institutions of higher education, invites them particularly "to carry out the necessary biomedical, epidemiological, technological, social, economic and behavioural research in order to elaborate and implement the strategies of health for all" and also to step up their collaboration with the ministries concerned and other organizations.

30. The UNESCO-WHO programme of co-operation for the prevention of AIDS naturally falls within this interdisciplinary perspective. It has to be acknowledged, however, that the collaboration called for has, up to now, taken place at the level of preventive education in primary and secondary schools.
31. This observation brings one to another aspect of the reflexion on the renovation of the structures of the institutions of higher education - the role of higher education within the overall system of education. Whether one thinks of the fight against AIDS or solutions to quite different crucial problems of the African continent, it is essential to keep in focus many aspects of the interdependence among the sub-systems of the primary, secondary and high schools, without losing sight of the formal, informal and non-formal education of youth and adults.
32. The scrutiny of the increasingly numerous possibilities of setting up or reinforcing networks, especially in the domains of distance education, and technologies of information and communication should lead to a definition of modalities that truly encourage necessary exchanges. And in this regard, it is, no doubt, timely to examine, as suggested to you by several of the documents before you, the technical, administrative and pedagogical aspects of such relationships as can be established, particularly and sometimes, by satellites.

It would be appropriate, however, to advocate two fundamental features of regional co-operation. The action plans envisaged at Arusha concerning distance education as well as those of Lome with respect to computer science need to be seen in the perspective of a truly panafrican intellectual community, embracing to all the linguistic zones, and intending to encourage exchanges between francophones, anglophones, lusophones and arabophones. Clearly, UNESCO cannot but encourage this extended solidarity which does not only have cultural implications but also economic and social. It is also clear that a joint research for solutions to the global problems such as those concerning drought or the rational use of the ecosystems of tropical forests cannot but go beyond linguistic boundaries.

#### ROUND TABLES :

34. I would like to say a word about round tables and emphasize, in the first place, the need for the kind of reflexion which would have a bearing on the design of African community projects, African models of development, according to which training objectives can be defined in terms of an endogenous approach. As the Director-General

- said at the Nigerian National Assembly in Lagos (Nigeria) on April 3rd, 1989 : "Africa is not another Europe, another America, another Asia.. but Africa is African. The models and the scenarios, conceived for other social structures and other mentalities, have not worked..." in this continent.
35. This observation leads to one of the essential themes of this seminar : that of co-operation between institutions of higher education, at different levels : South-South, and North-South; regional and sub regional.
  36. As regards exchanges between African institutions, UNESCO has not ceased recommending and backing them since the 1962 Tananarive Conference on the Development of Higher Education in Africa. During the Accra seminar in December 1991, the representative of United Nations Development Programme underlined the readiness of his Organization to collaborate with UNESCO and with African States to foster co-operation especially within the framework of the TCDC mechanism of technical co-operation between developing countries, and that of South-South.
  37. Another topic for reflexion relative to co-operation, which also raises technical and practical questions, is the organization of a genuine interactivity in the utilization of technologies of communication such as the use of satellites. It is, in fact, extremely important to create a real atmosphere of exchange.
  38. As there is a special paper on the experience of UNESCO in the framework of UNITWIN Programme and UNESCO chairs, I would like to limit myself to the few remarks I have made on the round tables. I must, however, say that the Director-General expects you to identify and formulate maximum co-operation projects leading to the setting up of a greater, or rather very large, number of UNESCO chairs.

#### CONCLUSION

39. Such are the problems before our seminar which are also taken into account within activities of the UNESCO programme. These activities will be reinforced in the next programme to the extent the UNESCO General Conference will confirm the suggestions that have already been made by many Member States and by the Director-General. They are in keeping with the wishes of Heads of State and Government of the OAU, expressed in a resolution at their last conference held in Dakar from June 29 to July 1, 1992, that the role of institutions of higher education in Africa be reinforced. The Director-General, in fact, firmly hopes to answer the appeal made to him through that resolution, in close collaboration with the United Nations Development

Programme (UNDP) and the Association of African Universities, especially in the framework of the programme "Priority Africa". He will bear in mind the preoccupations stated in the United Nations New Agenda for the Development of Africa in 1990s (UN-NADAF), by paying particular attention to the proposals your seminar will make.

**CLOSING ADDRESS BY MR MAGUED DIOUF,  
DEPUTY MINISTER IN CHARGE OF STATE MODERNIZATION, TECHNOLOGY,  
LABOUR AND PROFESSIONAL TRAINING**

Your Excellency the Minister,  
Your Excellencies the Ambassadors,  
Representatives of Regional, Governmental and Non-Governmental  
International Organizations,  
Representatives of United Nations Agencies,  
Vice-Chancellors, Rectors, Deans, Directors, Professors,  
Lecturers, Students,  
Ladies and Gentlemen,

You have now come to the end of your five days' reflexion centered, for this second Seminar, on the restructuring of Higher Education in Africa. Your seminar directed its thoughts particularly, to the policies and modalities of admission to the various training courses, planning and allocation of resources, and to structures and interdisciplinary studies within the context of new communication technologies.

The problem of modalities of admission, and therefore of the policy of orientation towards different training courses, recalls the question of unemployment of graduates, of the relation between training and employment, and of the numerous students who leave the university with nothing connected with their initial hopes.

Though you represent many countries, different from one another due to differences in the language of instruction and in socio-cultural origins, which indeed constitute a major element in the wealth of your contributions, you do not think it rational to maintain two separate systems are managed through a systematic selection accompanied by bursaries, and the other by a free entry, more or less, linked only to success in a series of examinations at the end of secondary studies. You have recognized that a public service and, in general, an administration, like any other management structure, needs a productive, dynamic and competitive sector. Having taken the full measure of this interdependence between the tertiary education and the productive sector, you have shown quite clearly that diversification of courses is no longer a mere slogan which appears in one report after another, but an objective necessity corresponding to no less objective needs of our societies. Still it is necessary, as you stressed, that orientation provided for students should not sanction negatively an ineptitude or insufficiencies, but positively allow the choice of courses sufficiently attractive in terms of employment prospects. And the realities are there to remind us that neither authoritative decisions nor free liberalism gives satisfaction, in the long run. Besides the fact that neither of these attitudes corresponds to our humanist ethics, the upheavals in a whole half of Eastern Europe and the glaring inadequacies of certain North American types of education show that genuinely democratic planning constitutes the narrow but essential way to our development as free men.

This planning includes, of course, not only that of allocated resources but increasingly also of those generated by the institution itself. It is no more a question of noting, every ten years, the growing inequalities of salaries, scholarships, aid and loans to students, and the continuing small grant given to education and research again. It is no more a question of depending on the state for all expenses, of claiming autonomy in the management of allocated means, without comment, vis-à-vis the services the university renders. Autonomy calls for a spirit of creativity allied to an awareness of responsibility. There again, production and management are closely linked, and it is encouraging that our universities, even the older ones, are beginning to impose on themselves the tasks of developing such services as a judicial and accounting consultancy, clinical and bacteriological analysis, and general or specialist health care in relation with an indispensable policy of prevention as well as self-financed publishing centres.

The state, on its part, cannot but congratulate universities on these initiatives which can motivate state specific intervention when heavy investment becomes indispensable.

Another subject which has been given a great deal of attention in your discussion is the renovation of post secondary structures.

You stressed their inadequate nature shown through out-dated syllabuses and courses which are too academic and are unrelated to present day realities.

In this connection, I wish to underline the need for African Universities to refuse to be what EINSTEIN called "this silent temple" where formulae and concepts are manipulated without caring about their impact on the life of citizens. The University must undertake its renovation work, open itself to society, take into consideration the aspirations of the people, and suggest solutions to the many problems which assail us from everywhere. It is at this price that the University can gain credibility and be rehabilitated.

If traditional models can continue to suit the elite, the most functional partitioning and regroupings of disciplines among institutions constitute nowadays a necessity, considering the number of students, and also the cost of training adapted to technological and cultural necessities in the last years of the twentieth century. Some courses will always remain annual; but others can perfectly be grouped into units or modules for several periods and types of study - long and short, geographical and geological, technological and didactic - among many others. Such structuring is perfectly suited not only to the elimination of duplication, but also to the continuing training of adults engaged in professional life, an aspect which has for a long time been neglected by our institutions of higher education.

But, as one should know, every advantage derived from a system has its own demands. Just as doctors have always refused to compensate a weakness in cardiology by a good result in urology or vice-versa, so must students quickly realize the considerable selectivity and, therefore, the increasing effort required of them. This effort is necessary in respect of each module of study; and, in the end, success in earning a degree will depend, not as previously on an annual average mark, but success in all three modules.

Let us add that the flexibility of the system allows the increase of options and lessens the risks of global failures if the best orientation is made at the very first beginning.

It is in this context that integration of higher education in Africa can demonstrate its capabilities in full, reserving in each institution a certain number of specialities which, should it be otherwise, could be available everywhere, but at much greater cost and at much inferior level. If Europe itself has chosen this path, our countries, which are less well-provided for, have no alternatives; otherwise they will come to possess, except in the case of very few of them, not universities but parking places where our youth will go to "kill the time".

The modern communication and information techniques and all the multi-media materials you have tested and appreciated allow you to perceive the productivity gains in education and training which are at our students' disposal nowadays. Mobility among pupils and students cannot but encourage the development of their critical mind, and the capacity to carry out an objective and rigorous analysis of facts, both of which are indispensable qualities for their future professional success and their full cultural development.

To put the finishing touch to your seminar, as I understand, you devoted time towards its end to the study of a concrete case of pluridisciplinary courses. You, as it were, went back to the laboratory to challenge the models you elaborated with a dramatic problem affecting not only our continent but also the whole world. It was the hour of truth. I have no doubt that the wealth of your discussions enabled you to overcome the difficulties involved. I have no doubt, either, that your intellectual honesty urged you to modify this or that part of the model as soon as you discovered contradictions and there are always contradictions between results obtained from theory and those reached through new observed phenomena. It is in this way that the scientist has always progressed. And this is as true for the director of an enterprise as for the politician.

Ladies and Gentlemen,

I wish to congratulate you on the great contribution your meeting represents not only for the development of the pupils and students but also for citizens as a whole. No doubt, your conclusions and recommendations will be carefully examined and

given the greatest attention by our governments; so much is the success of training linked in a "bi-univocal" way to the success of development.

Before I end, let me thank UNESCO and the Association of African Universities which took the fortunate initiative to organize this meeting aimed at finding remedies for the ills of our universities.

My thanks go also to the Vice-chancellors, Rectors, and Presidents of African Universities who have made the journey to Dakar in order to bring their contribution to the dynamic reflexions aimed at the renewal of the African University. I wish all of you a safe journey back to your respective homes.

Ladies and Gentlemen,

I declare closed the Seminar on the Restructuring of African Universities organized in Dakar by UNESCO in collaboration with the Association of African Universities.

Thank you.

## REPORT ON THE WORKSHOPS

## AUDIOVISUAL WORKSHOP

Selections from various OLYMPUS and UNISAT programmes were screened, analysed and discussed on the basis of the working document prepared for the Seminar by VIDEOSOP entitled: "Consideration of the use of audiovisual and satellite media in universities, based on some French experiments".

OLYMPUS FRANCE SATELLITE PROGRAMMES

- ENDOSCOPIA, a training programme on endoscopy of the alimentary tract (VIDEOSOP).
- Collège de France courses and lectures (VIDEOSOP):
  - Molecular chemistry course by Prof. Lehn, holder of the Nobel Prize for Chemistry.
  - Lecture on the Genesis of the State by Pierre Bourdieu.
  - Lecture on astrophysics by Prof. Antoine Labeyrie.
- Science lectures (CNED):
  - The water cycle.
  - 600 million years of evolution.
- Course of mathematics and statistics applications in medicine and biology.
- Magazine promoting the teaching and learning of the French language (FRANCE 2).

UNISAT PROGRAMMES

Series of programmes on AIDS.

- The epidemiological approach in developed countries of the West, and in Africa and Asia.
- Analysis of different strategies envisaged to eradicate the pandemic (biological and clinical approaches, the vaccine problem, etc.).
- Series of programmes on parasitic and tropical diseases.

### DCMEF WORKSHOP

Participants were able to question the following compact discs:

- Sesame, published by AUPELF/IREF: a bibliography of agronomic references.
- CD Theses, published by Lasermedia, a reference list of theses submitted in French universities.
- CD MED, published by INSERM, a bibliography of medical references relating to infectious diseases and AIDS.
- IBRD, published by the International Children's Centre: a bibliography on the general subject of children.

### VIDEODISK WORKSHOP

- Seventeen questions concerning AIDS: an instructional programme dealing with basic questions relating to AIDS (epidemiology, detection, prevention).
- Human tropical pathology: an interactive instructional programme dealing comprehensively with human tropical pathology and AIDS.
- Participants were able to interrogate the disks and assess the filmed sequences concerning laboratory techniques, parasitic cycles and microscopic sequences, as well as static photographs.

### DATA-BANK WORKSHOP

- On-line interrogation of the PASCAL multidisciplinary science base covering medicine and the exact sciences.
- Interrogation of the MEDLINE medical base.
- Multibase interrogation on the subject of AIDS on the QUESTEL server
- The interrogations were prepared from various thesauri relating to the above-mentioned data-bases.

### LOCAL SERVER WORKSHOP

A demonstration of the documentary server of the SYFED centre of AUPELF/UREF enabled participants to interrogate the data-base of research workers in Africa, the Caribbean and the Indian Ocean.

LIST OF DOCUMENTS

|                 |   |                                                                                                                                                        |
|-----------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Doc./CA/Dakar/1 | - | Agenda                                                                                                                                                 |
| Doc./CA/Dakar/2 | - | Distribution of students among disciplines (presented by Professor Ajayi, University of Ibadan, Nigeria)                                               |
| Doc./CA/Dakar/3 | - | Utilization of funds granted by Governments (presented by Professor Goma, Zambia)                                                                      |
| Doc./CA/Dakar/4 | - | Post-secondary Educational Structures in Africa - Innovations and Reforms (presented by Professor NIANG, University Cheikh Anta Diop, Dakar (Senegal)) |
| Doc./CA/Dakar/5 | - | The Restructuring of African Universities - Synopsis of information provided by participants                                                           |
| Doc./CA/Dakar/6 | - | R e s t r u c t u r i n g , Interdisciplinarity and new Information and Communication Technologies                                                     |
| Doc./CA/Dakar/7 | - | Provisional list of participants                                                                                                                       |
| Doc./CA/Dakar/8 | - | List of documents                                                                                                                                      |

Reference documents :

"Development of Higher Education in Africa - Accra Seminar, 25 - 29 November 1991"

"Study on Cost Effectiveness and Efficiency in African Universities" (Association of African Universities)

"Leadership and Organization of Higher Education Institutions" by Professor Sawyerr (University of Ghana-Legon) presented at the Accra Seminar (November 1991)

"The African University 1961 - 1991 : Potential, Process, Performance and Prospects"

LISTE DES PARTICIPANTS/  
LIST OF PARTICIPANTS

ETATS MEMBRES/MEMBER STATES

ALGERIE

Prof. Omar BENBEKHTI

ex-Directeur de Cabinet,  
Ministère des Universités

BENIN

Prof Lucien CHEDE

Recteur, Université  
nationale du Bénin, Cotonou

BURKINA FASO

Prof. A. TRAORE

Recteur, Université de  
Ouagadougou

M. John B. KABORE

Conseiller, (ancien Sous-  
Directeur général à  
l'UNESCO)

BURUNDI

Prof. G. NTUNAGUZA

Conseiller au Recteur,  
Université du Burundi

REPUBLIQUE

CENTRAFRICAINE

M. SIOKE-RAINALDY

Recteur, Université Bangui

CONGO

Prof. A. EKOYA

Vice-Recteur, Université  
Marien Ngouabi, Brazzaville

COTE d'IVOIRE

Prof. A. HAUHOUOT

Vice-Recteur, Centre  
Universitaire de Cocody

DJIBOUTI

M. NIAZI

Direction Générale,  
Education nationale

ETHIOPIE

Prof J. KINFU

Dean, Faculty of Business  
and Economics, University of  
Addis Ababa

GABON

Prof. J. LEBIBI

Recteur, Université Masuku

GHANA

Prof. KWAMI

Vice-Chancellor, University  
of Kumasi

Mr DANIELS

Registrar, University of  
Ghana-Legon

|                                          |                                                                                               |
|------------------------------------------|-----------------------------------------------------------------------------------------------|
| GUINEE<br>Prof. SEYDOUBA CAMARA          | Recteur, Université Kankan                                                                    |
| KENYA<br>Dr D.K. SEREM                   | Deputy Principal, Maseno University                                                           |
| LESOTHO<br>Dr L.T. JONATHAN              | Pro Vice-Chancellor, University of Lesotho                                                    |
| MADAGASCAR<br>Mme J. DINA                | Recteur, Université Tulear                                                                    |
| MALI<br>M. A.S. MAIGA                    | Directeur national adjoint, Enseignement supérieur                                            |
| MAROC<br>Prof. O. MOUDDANI               | Vice-Doyen, Faculté de Droit, Université de Rabat                                             |
| MAURITANIE<br>Prof. Mohamed Yehdih TOLBA | Secrétaire général, Université Nouakchott                                                     |
| NAMIBIE<br>Mr R. JACOBS                  | Head, Strategy Planning, University of Namibia                                                |
| NIGER<br>M. Boukary Mahaman SANI         | Doyen, Faculté Pédagogie Université de Niamey                                                 |
| NIGERIA<br>Prof. AJAYI                   | Professor Emiritus, University of Ibadan                                                      |
| Prof. ALAO                               | Vice-Chancellor University of Lagos                                                           |
| SAO TOME<br>M. Victor BONFIM             | Conseiller au Ministère de l'éducation                                                        |
| SENEGAL<br>Prof. S. NIANG                | Recteur, Université Cheikh Anta Diop, Dakar                                                   |
| Prof. A. L. NDIAYE                       | Recteur, Université de Saint Louis                                                            |
| Prof. O. SOCK                            | Directeur, Ecole normale supérieure d'enseignement technique et professionnel (ENSETP), Dakar |

SUDAN  
Dr Ahmed Ali EL IMAN

Vice-Chancellor, The Holy  
Quaran University

SWAZILAND  
Dr W. SUKATI

Registrar, University of  
Swaziland

TCHAD  
Prof. T. ERDIMI

Recteur, Université Tchad

TOGO  
Prof. K.F.SEDDOH

Recteur, Université du Benin

TUNISIE  
Prof. A.HENDAOUI

Recteur, Université de Tunis  
III

ZAMBIA  
Prof L. GOMA

Professor

Dr J. TEMBO

Acting Vice-Chancellor,  
Copperbelt University, Kitwe

#### ASSOCIATION OF AFRICAN UNIVERSITIES

Prof Juma SHABANI

Deputy Secretary-General

#### UNIVERSITE DE DAKAR

M. Oumar KANE

Doyen, Faculté de lettres et  
sciences humaines

M. M. KASSE

Directeur de pédagogie -  
réformes universitaires

M. M. D. SALL

Professeur

M. M. N'DIAYE

Faculté de médecine

M. A. NDIAYE

Vice-Doyen, Faculté des  
Sciences

#### UNIVERSITE DE SAINT-LOUIS

M. M. CISSE

Conseiller en communication,  
Université de Saint Louis

INSTITUTS D'ENSEIGNEMENT SUPERIEUR, Dakar

|                  |                                                                                  |
|------------------|----------------------------------------------------------------------------------|
| M. S. FONGANG    | Maître de conférences,<br>ENSUT, Dakar                                           |
| M. A. NGOM       | Maître de conférences,<br>ENSUT, Dakar                                           |
| M. M. KANE       | Formateur, Ecole normale<br>supérieure, Dakar                                    |
| M. B. Adama FALL | Professeur, Directeur<br>informatique, CESAG, Dakar                              |
| M. R. KOLLESSI   | Professeur, Centre africain<br>d'études supérieures en<br>gestion (CESAG), Dakar |
| M. M.Z. KODI     | Directeur de la formation,<br>Centre africain d'études<br>monétaires, Dakar      |

OBSERVATEURS/OBSERVERS

|                     |                                                                                                         |
|---------------------|---------------------------------------------------------------------------------------------------------|
| M. D. OUATTARA      | Resident Representative<br>United Nations Development<br>Programme, Dakar                               |
| Mr G. LEIBBRANDT    | Chairman, Netherlands<br>National Commission for<br>Unesco                                              |
| Dr A. NDORUKWIGIRA  | The African Capacity<br>Building Foundation, Harare                                                     |
| M. R.M. OUIMINGA    | Secrétaire général, Conseil<br>africain et malgache pour<br>l'enseignement supérieur<br>(CAMES)         |
| M. E. NTIZAYINDUSHA | Secrétaire général adjoint,<br>Conseil africain et malgache<br>pour l'enseignement<br>supérieur (CAMES) |
| M. F. MARI          | CONFEMEN                                                                                                |

FRANCE

Mme Régine THOMAS

Chargée de mission,  
Direction du Développement,  
et de la Coopération  
Scientifique, Technique et  
Educative, Ministère des  
affaires étrangères

M. PECCOUD

Sous-Directeur de  
l'Enseignement et de la  
Formation, Ministère de la  
Coopération et du  
Développement

Association des Universités partiellement ou entièrement de  
langue française (AUPELF)

M. M. GUILLOU

Recteur

UNESCO

Mr C. POWER

Sous-Directeur général pour  
l'Education

Mr E. ARMERDING

Directeur, Coopération avec  
les Etats d'Afrique

Mr P. OBANYA

Directeur du Bureau régional  
pour l'Education en Afrique  
(BRED), Dakar

Mr H. AGUESSY

Spécialiste de  
l'enseignement supérieur,  
BRED, Dakar

Mr D. BERIDZE

Division de l'enseignement  
supérieur

Mme S. RUSSELL

Coopération avec les Etats  
d'Afrique

EXPERTS CHARGES DE L'UTILISATION DES TECHNOLOGIES D'INFORMATION  
ET DE COMMUNICATION

M. Didier OILLO

AUPELF/UREF (Université des  
réseaux d'Expression  
française)

M. J. René BOURREL

AUPELF/UREF

M. P. PERREY

Directeur du VIDEOSCOPE,  
Université de Nancy II  
(France)

M. Ray PATTEN

Donogh O'Malley Regional  
Technical College,  
LETTERKENNY, Co. Donegal  
Ireland

Comité d'Organisation

Prof. O. SOCK

Directeur ENSETP, Dakar

M. T. DIATARA

Chargé de mission au  
Rectorat, Université Cheikh  
Anta Diop

M. H. AGUESSY

Spécialiste de  
l'enseignement supérieur,  
BRED A

M. D. BAMBOTE

Chargé de l'information,  
BRED A

M. A. BADARA BA

Chargé des affaires  
protocolaires, BRED A